

# WJ TAPE AND REEL DOCUMENT



401 River Oaks Parkway  
San Jose, CA 95134

SIZE

**A**

DWG. NO.

163278

SCALE

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SHEET

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**1.0**            **SCOPE**

This drawing defines requirements for Tape and Reel Packaging of WJCI Semiconductor devices in surface mount packages by external subcontractors.

**2.0**            **APPLICABLE DOCUMENTS**

EIA-481-B	8 mm through 200 mm Embossed Carrier Taping and 8 mm and 12 mm Punched Carrier Taping of Surface Mount Components for Automatic Handling
JESD-625	Requirements for Electrostatic Discharge Sensitive (ESDS) Devices
MIL-STD-883	Test Methods and Procedures for Microelectronics, Method 3015: Electrostatic Discharge Sensitivity Classification
J-STD-020	Moisture/Reflow Sensitivity Classification for Nonhermetic Solid State Surface Mount Devices
J-STD-033	Standard for Handling, Packing, Shipping, and use of Moisture/Reflow Sensitive Surface Mount Devices
JEP-113	Symbol and Labels for Moisture Sensitive Devices
EIA-541	Packaging material Standards for ESD Sensitive Items
EIA-583	Packaging material Standards for Moisture Sensitive Items

**3.0**            **MATERIALS**

- a. Carrier tape shall be black conductive type, having a surface resistivity of no greater than  $10^6$  ohms/square.
- b. Cover tape shall be anti-static, transparent, pressure-seal or heat-seal, having a surface resistivity (component side) between  $10^8$  and  $10^{11}$  ohms/square.
- c. Reels shall comply with the requirements of EIA-481.
- d. WJCI packages parts on both 7" and 13" reels as called out in the purchase order.



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**4.0**            **REQUIREMENTS**

4.1            Approved Package Tapes

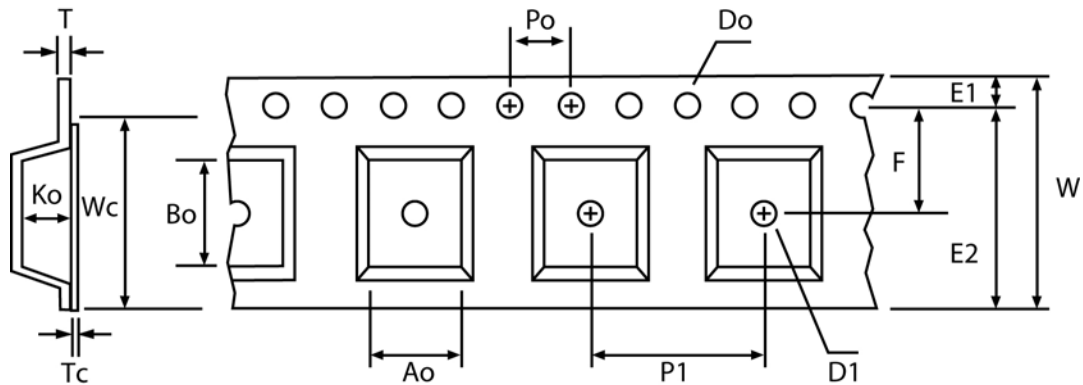
Device orientation in tape and specific tape size requirements are listed by package type in the figures in section 4.1 according to EIA-481. Only the tape part numbers referenced for each package are approved for use on WJCI products. Section 5.0 of this document provides a cross-reference table for WJCI product models to package types.

Drawing dimensions are in mm. Tolerances for Ao, Bo, and Ko are 0.1 mm.

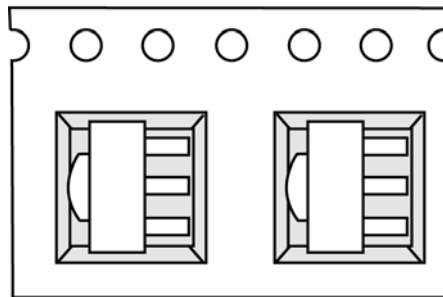


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# SOT-89



SOT-89 - Part Orientation



Vendor/Tape part #	Ao	Bo	Do	D1	E1	F	Ko	Po	P1	T	W
Argosy SOT89-HMS	4.3	4.75	1.5	1.5	1.75	5.5	1.8	4.0	8.0	0.35	12.0
Advantek SOT89DC102-P2	4.6	4.9	1.5	1.50	1.75	5.50	1.9	4.0	8.0	0.30	12.0
3M Surface Mount Supplies TW013861 *	4.42 ± 0.1	4.88 ± 0.1	1.55 ± 0.05	1.50 + 0.25	1.75 ± 0.1	5.50 ± 0.1	1.85 ± 0.1	4.0 ± 0.1	8.0 ± 0.1	0.30 ± 0.05	12.0 +0.3 -0.1

\*Note: 3M Surface Mount Supplies TW013861 tape is approved for use on AH110-89 only.



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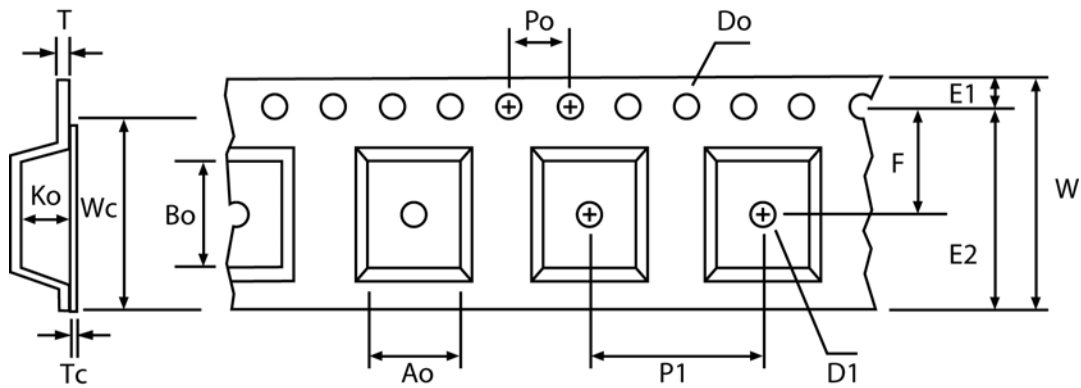
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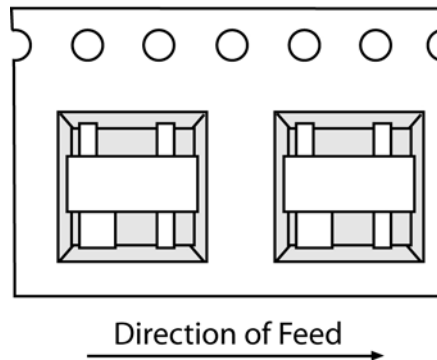
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# SOT-143



SOT-143 - Part Orientation



Vendor/ Tape part #	Ao	Bo	Do	D1	E1	F	Ko	Po	P1	T	W
Avantek SOT-23 DV 500	3.15	2.55	1.5	1.0	1.75	3.5	1.07	4.0	4.0	0.21	8.0



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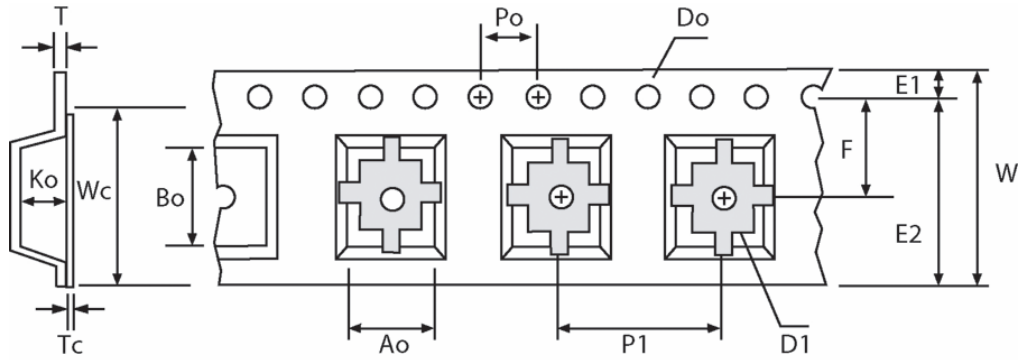
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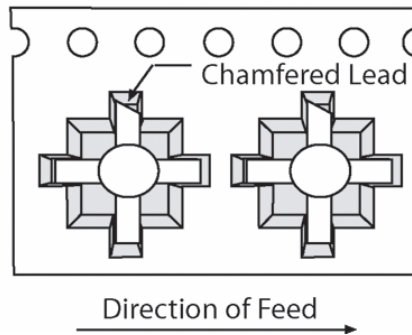
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# SOT 86



SOT 86 - Part Orientation



Vendor/Tape part #	Ao	Bo	Do	D1	E1	F	Ko	Po	P1	T	W
3M US01106	6.53	6.27	1.55	1.5	1.75	5.5	1.85	4.0	8.0	.292	12.0
Avantek TRAN4L- AC101.P2	7.0	7.0	1.5	1.5	1.75	5.5	2.05	4.0	8.0	0.30	12.0



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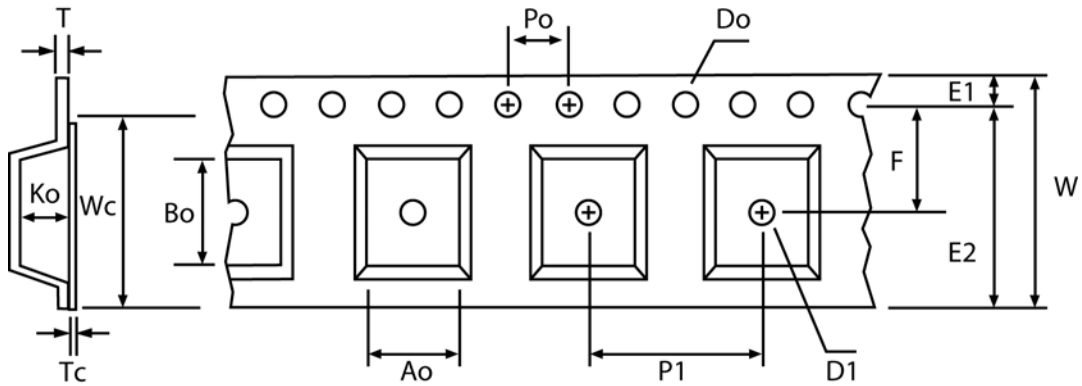
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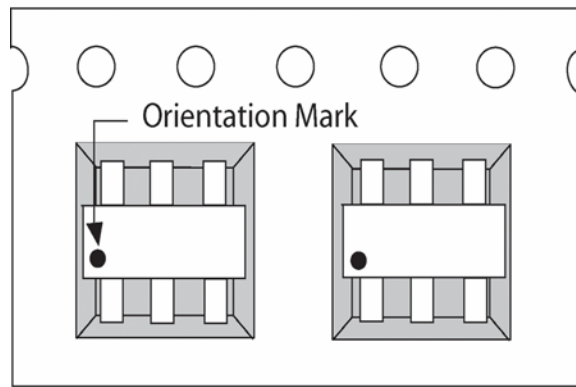
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# SOT 363



SOT 363 - Part Orientation



Direction of Feed  
→

Vendor/Tape part #	Ao	Bo	Do	D1	E1	F	Ko	Po	P1	T	W
Advantek SC70NS-A	2.25	2.4	1.5	1.0	1.75	3.5	1.2	4.0	4.0	.30	8.0



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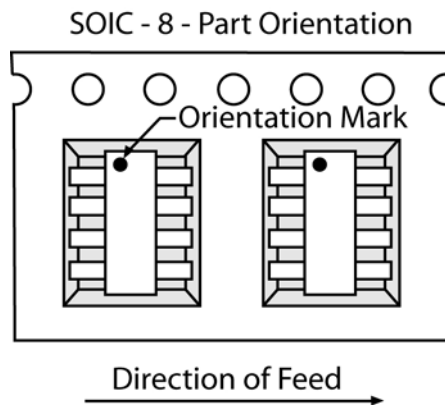
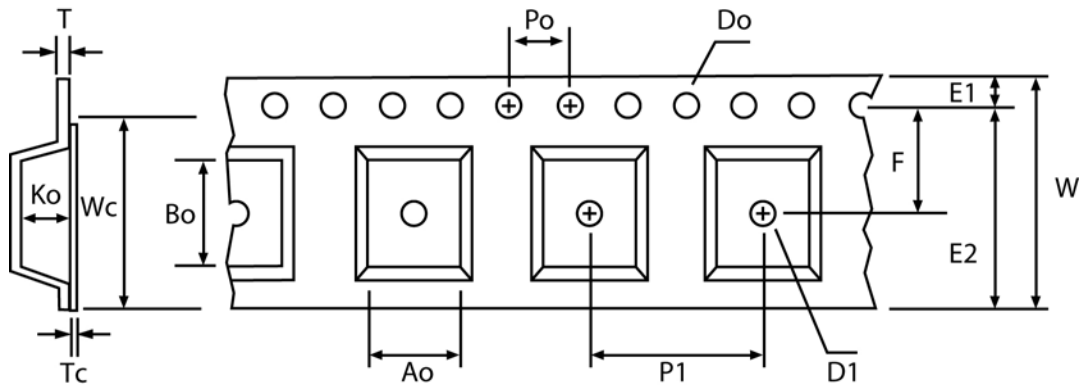
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# SOIC 8



Vendor/Tape part #	Ao	Bo	Do	D1	E1	F	Ko	Po	P1	T	W
Argosy SOIC8HMS	6.45	5.3	1.5	1.5	1.75	5.5	2.2	4.0	8.0	.35	12.0
Advantek SOIC8PT- CC87.0P2B	6.4 min.	5.2 min.	1.5 +0.1	1.5 min.	1.75	5.5 ±0.05	2.1 min.	4.0	8.0	0.30 ±0.05	12.0 ±0.3
Advantek SOIC08-AC A0103-89-12	6.4	5.2	1.5 +0.1	1.5 min.	1.75	5.5 ±0.05	2.1	4.0	8.0	0.30 ±0.05	12.0 ±0.3



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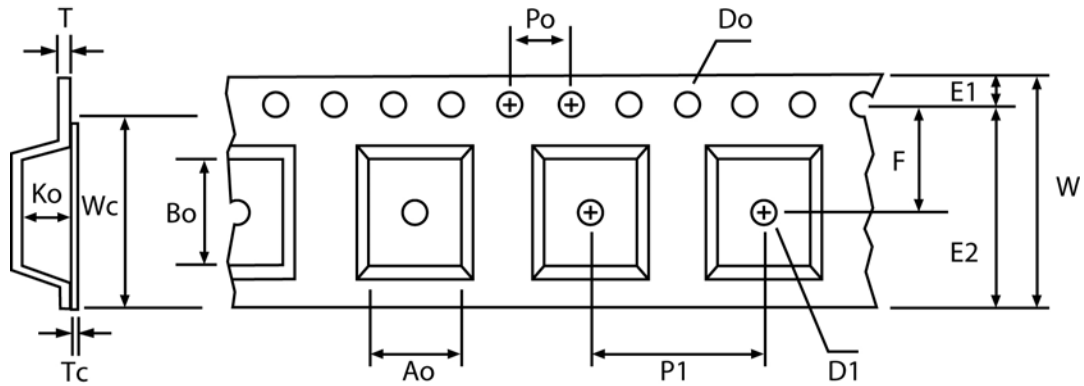
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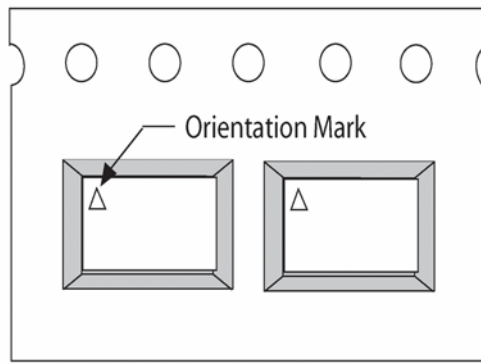
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# SME - S PAK 3



SME - S PAK3 - Part Orientation



Direction of Feed  
→

Vendor/Tape part #	Ao	Bo	Do	D1	E1	F	Ko	Po	P1	T	W
Argosy SME900SCP	12.5	9.45	1.5	1.5	1.75	11.5	5.0	4.0	16.0	0.35	24.0



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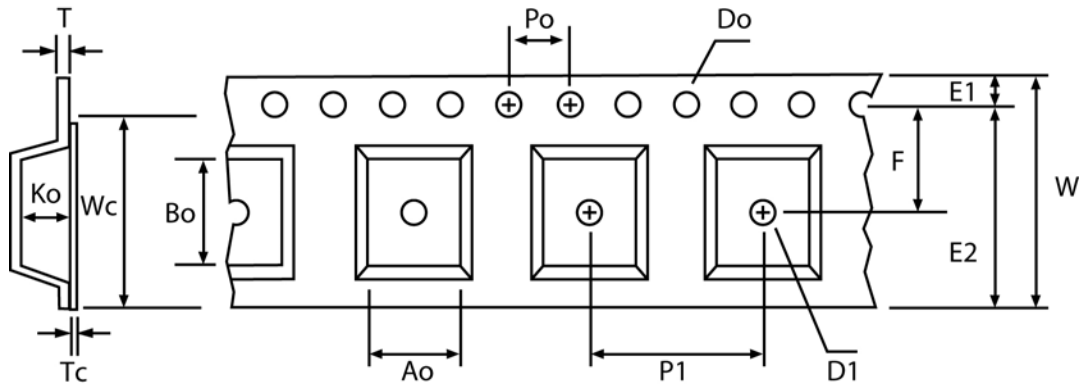
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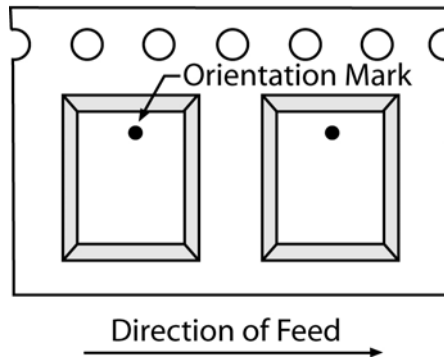
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# J PAK 18



J PAK 18 - Part Orientation



Vendor/Tape part #	Ao	Bo	Do	D1	E1	F	Ko	Po	P1	T	W
Advantek HMJ-01-AX	11.7	14.5	1.5	1.5	1.75	11.5	7.1	4.0	16.0	.35	24.0



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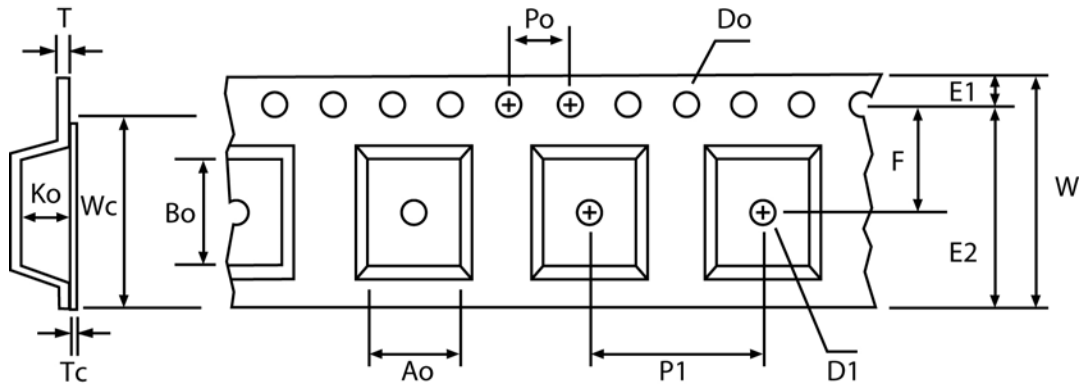
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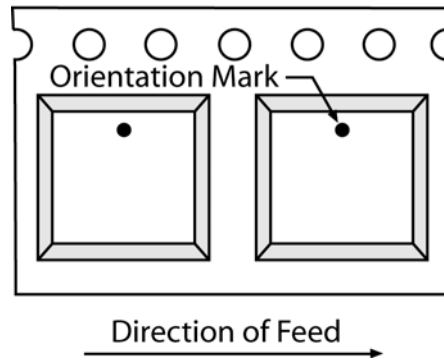
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# J PAK 22



J PAK 22 - Part Orientation



Vendor/Tape part #	Ao	Bo	Do	D1	E1	F	Ko	Po	P1	T	W
Advantek HMJ-03-A	16.7	17.1	1.5	1.5	1.75	11.5	6.15	4.0	24.0	.30	24.0



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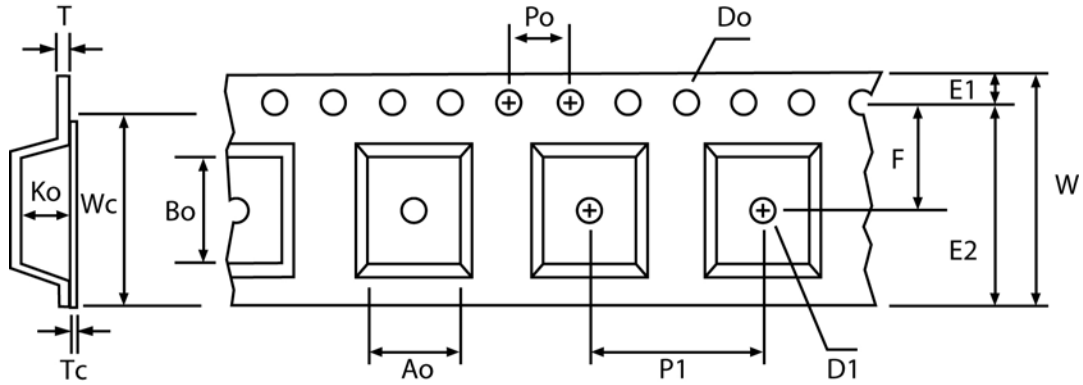
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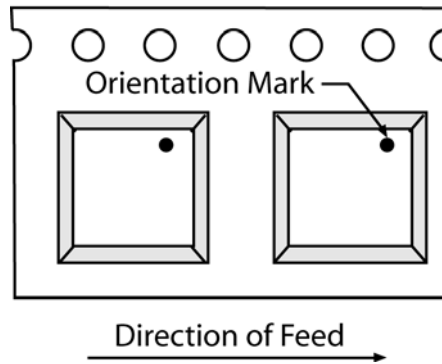
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# LGA 3X3



LGA - Part Orientation



Vendor/Tape part #	Ao	Bo	Do	D1	E1	F	Ko	Po	P1	T	W
Avantek SOT-23-IV	3.15	3.15	1.5	1.0	1.75	3.5	1.6	4.0	4.0	0.21	8.0



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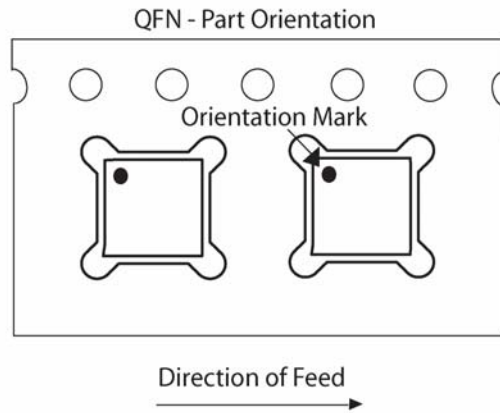
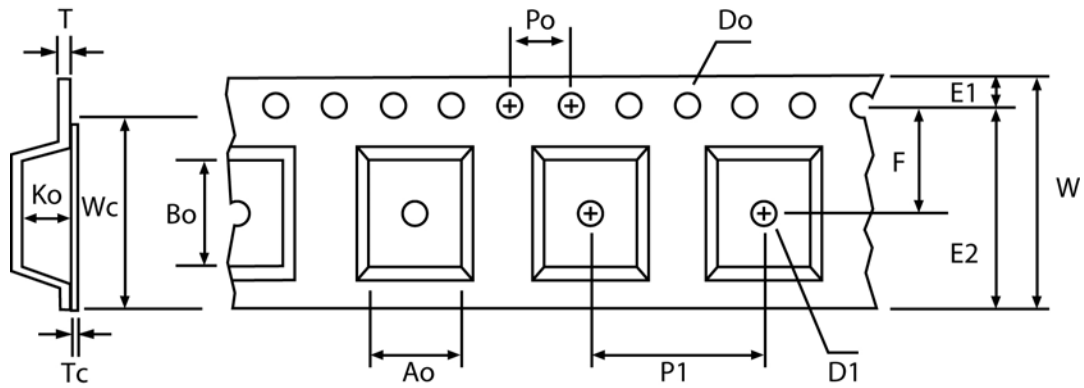
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# QFN 6X6



Vendor/Tape part #	Ao	Bo	Do	D1	E1	F	Ko	Po	P1	T	W
Avantek ML0606AQFN	6.30	6.30	1.5	1.5	1.75	7.5	1.10	4.0	12.0	0.30	16.0



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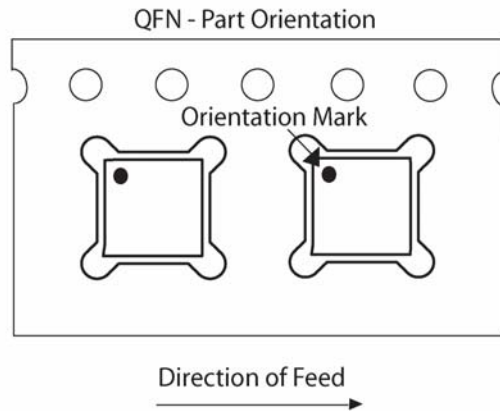
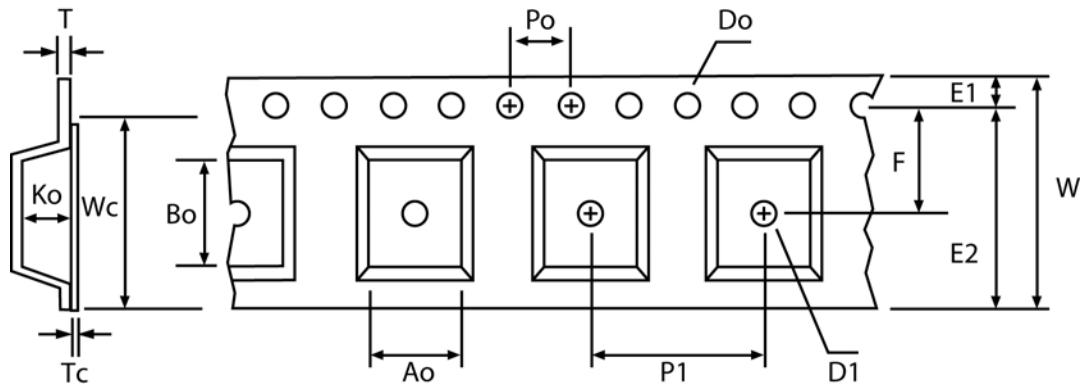
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# QFN 4X4



Vendor/Tape part #	Ao	Bo	Do	D1	E1	F	Ko	Po	P1	T	W
<b>Kostat KS-1208-40</b>	4.30	4.30	1.55	1.5	1.75	5.5	1.25	4.0	8.0	0.30	12.0



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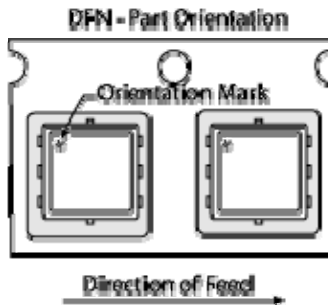
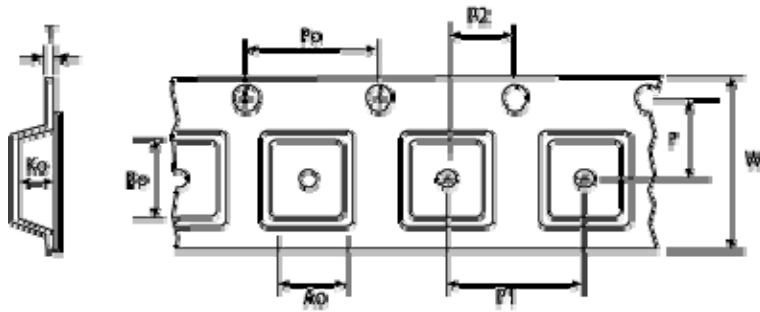
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# DFN 3X3



Vendor/Tape part #	Ao	Bo	F	Ko	Po	P1	P2	T	W
3M MA029981	3.23	3.17	3.5	1.37	4.0	4.0	2.0	.254	8.0



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4.2 ESD Handling

Devices shall be treated as Class 0 ESD sensitive devices rated in accordance with MIL-STD-883, Method 3015 and handled in accordance with JESD-625.

4.3 Taping

Devices shall be taped in accordance with EIA-481. Different manufacturing lots shall not be mixed on one reel unless specifically called out in the purchase order. Table 1 indicates the maximum quantity of each device package that can fit on a reel. All devices from a manufacturing lot in excess of the designated reel quantity are to be returned to WJCI in a separate ESD/MSL protective package.

**Table 1**

Package type	Reel size (Inches)	Max Quantity per reel (Note 1)
SOT-89	13	3000
SOT-89	7	1000
SOT-86	13	3000
SOT-86	7	1000
SOT-363	7	3000
SOIC-8	7	1000
SOIC-8	13	2500
QFN 6x6	7	1000
QFN 6x6	13	2000
QFN 4x4	7	1000
QFN 4x4	13	4000
3x3 LGA	7	500
J-PAK 18	13	500
J-PAK 22	13	500
SOT-143	7	1000
S-PAK 3	13	500
DFN 3x3	7	3000
DFN 3x3	13	10,000

**Note 1:** Standard quantities are called out in Table 4.



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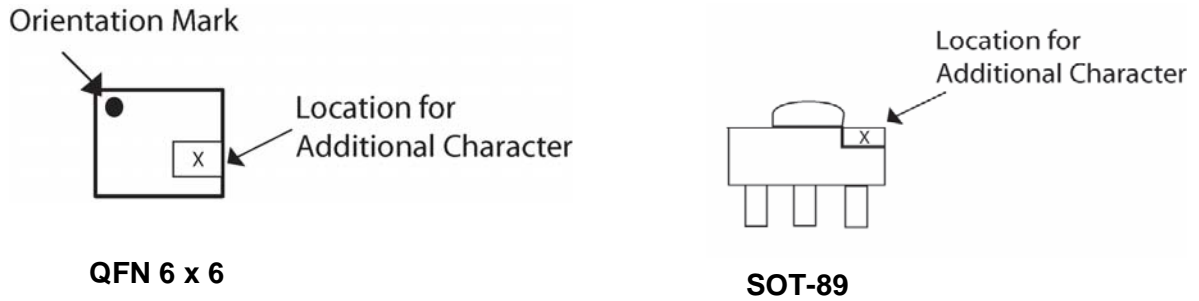
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4.4

Additional Device Marking

The final model type for some devices is not determined until after the device is tested. Table 2 lists the products and the additional character that will be placed on each device prior to Tape & Reel in order to distinguish the device models. This character must be laser marked on the device, per Figure 2, and not overlap any other existing marking. The minimum acceptable height of the character is 18 mils.

**Figure 2**



**Table 2**

WJCI Model	Part	Additional
AM1	A1	0
AG101	A1	1
AM1-2	A1	2
AG102	A1	3
AM1-G	A1G	0
AG101-G	A1G	1
AM1-2G	A1G	2
AG102-G	A1G	3
AH1	AH1	0
AH1-1	AH1	1
AH1-2	AH1	2
AH1-5	AH1	5
AH1-6	AH1	6
AH1-7	AH1	7
AH1-8	AH1	8
AH1-E	AH1	E
AH1-G	AH1G	0
AH1-1G	AH1G	1

<b>WJCI Model</b>	<b>Part</b>	<b>Additional</b>
AH1-2G	AH1G	2
AH1-5G	AH1G	5
AH1-6G	AH1G	6
AH1-7G	AH1G	7
AH1-8G	AH1G	8
AH1-EG	AH1G	E
AH102A	102A	0
AH102A-1	102A	1
AH102A-G	102AG	0
AH102A-1G	102AG	1
FH1	FH1	0
FH101	FH1	1
FH1-G	FH1G	0
FH101-G	FH1G	1
CV210-101	CV210-1	101
CV210-102	CV210-1	102
<b>CV210-102F</b>	<b>CV210F-1</b>	<b>102</b>
<b>CV210-102AF</b>	CV210-1AF	102
CV210-201	CV210-2	201
<b>CV210-201F</b>	<b>CV210F-2</b>	<b>201</b>
CV210-203	CV210-2	203
<b>CV210-203AF</b>	<b>CV210-2AF</b>	<b>203</b>
CV210-301	CV210-3	301
<b>CV210-301F</b>	<b>CV210F-3</b>	<b>301</b>
<b>CV210-301AF</b>	<b>CV210-3AF</b>	<b>301</b>
CV211-101	CV211-1	101
<b>CV211-101F</b>	<b>CV211F-1</b>	<b>101</b>
<b>CV211-101AF</b>	<b>CV211-1AF</b>	<b>101</b>
CV211-103	CV211-1	103
<b>CV211-103F</b>	<b>CV211F-1</b>	<b>103</b>
<b>CV211-103AF</b>	<b>CV211-1AF</b>	<b>103</b>
CV211-201	CV211-2	201
<b>CV211-201F</b>	<b>CV211F-2</b>	<b>201</b>
<b>CV211-201AF</b>	CV211-2AF	201
HMJ7-1	HMJ7	1



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4.5 Packaging

All reels of WJ devices with MSL rating between 1 and 5a shall be placed in MSL protective bags, one reel per bag. Each bagged reel shall then be individually boxed for customer shipment and include an extra loose barcode label in each box. The details for labeling all reels, bags and boxes are listed in Section 4.7. All WJCI devices must be vacuum sealed in moisture barrier bags along with a desiccant and humidity indicator card in accordance with J-STD-033. All devices in excess of the standard reel quantities are to be returned to WJCI on tape, (not reeled), in MSL protective bags as dictated by the product. Reels of WJCI devices with MSL rating “ N/A “ shall be packaged in ESD protective bags.

4.6 Handling for Moisture Sensitive Parts

For all WJCI devices with MSL (Moisture Sensitivity Level) between 2a and 5a product must be baked and dry packed in accordance with J-STD-033. Dry pack requirements call for desiccant, humidity indicator card, sealed moisture barrier bags, and MSL labeling. Table 4 in Section 5.0 provides the MSL rating for each WJCI product. Dry bake times are referenced in Table 3 for each package type. The supplier may choose between the two bake temperatures (125°C or 150°C) and associated times, shown in Table 3, to conform with their standard process.

**Table 3**

Package type	Package Body Thickness	MSL Rating	Bake @125°C (Hours)	Bake @150°C (Hours)
QFN 6x6, SOT-143, SOT-363	≤ 1.4mm	2 / 2a	8	4
QFN 6x6, SOT-143, SOT-363		3	16	8
QFN 6x6, SOT-143, SOT-363		4	21	10
QFN 6x6, SOT-143, SOT-363		5	24	12
QFN 6x6, SOT-143, SOT-363		5a	28	14
QFN 4X4, SOT-89, SOT-86, SOIC8	≤ 2.0mm	2 / 2a	23	11
QFN 4X4, SOT-89, SOT-86, SOIC8		3	43	21
QFN 4X4, SOT-89, SOT-86, SOIC8		4, 5, 5a	48	24



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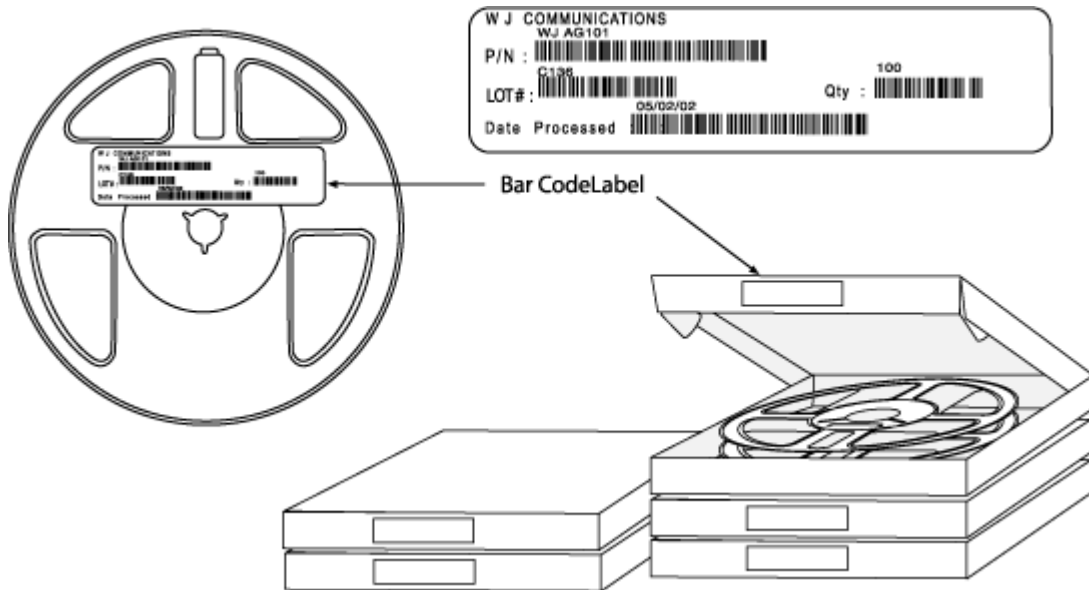
4.7 Package Labeling

4.7.1 Each reel, bag, and reel box shall be barcode labeled in accordance with EIA-481, as appropriate to the device, with the following information, unless otherwise specified:

- WJCI part number
- WJCI manufacturing lot number
- Date for taping
- Quantity per reel

The placement for each barcode label is shown in the Figure 3. An additional barcode label is to be included in each reel box. The required labeling information is obtained from a label affixed to each container (bag, canister, tube, etc.) used to provide the devices to the supplier and also from the purchase order. For the excess taped, non-reeled parts, the barcode label should be placed only on the ESD/MSL protective bag.

**Figure 3**



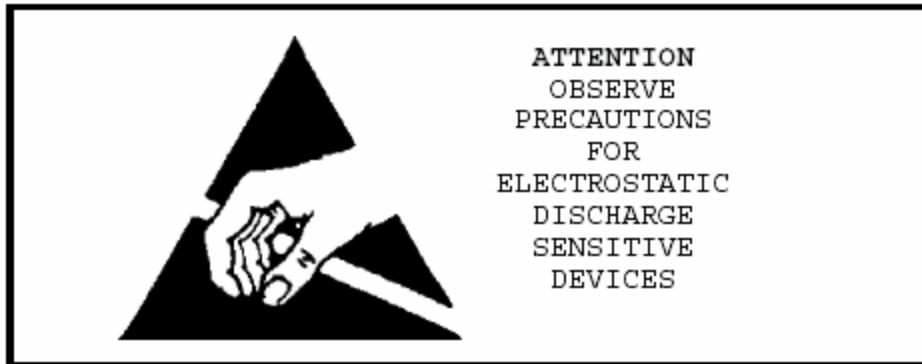
Note: ESD bag for reel in box was omitted for clarity of the labeling instructions.

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4.7.2 “ESD Sensitive” warnings shall be clearly marked on each reel bag and reel box. Either attaching a separate label or marking of the bag and box is acceptable. When using a label, place on the bag or box in such a way as to not interfere with the ability to open the bag or box. Do not use the label to fold over the reel bag or seal the box.

An example of an ESD Sensitive label is shown in Figure 4.

**Figure 4**



4.7.3 A Moisture-Sensitive ID Label must be placed on the reel box for all devices with MSL rating between 2a and 5a, per J-STD-033. When using a label, place on the box in such a way as to not interfere with the ability to open the box. Do not use the label to seal the box.

A sample of this label is shown in Figure 5.

**Figure 5**



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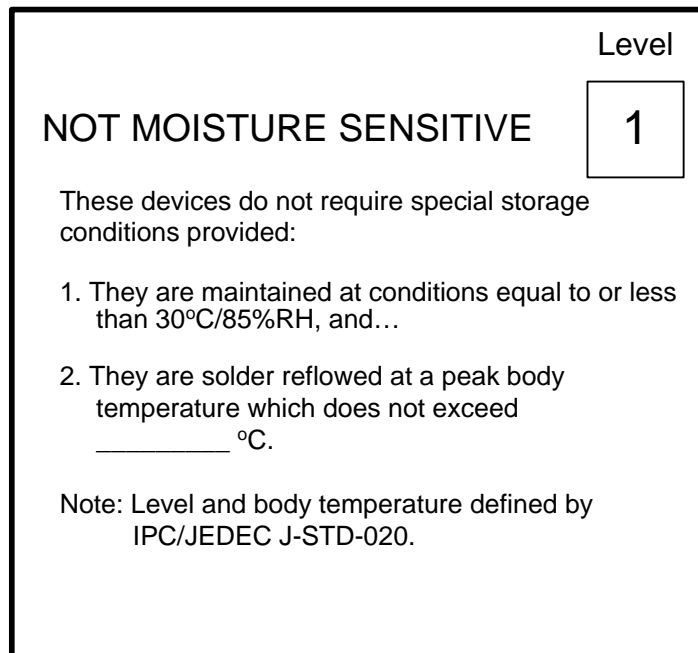
4.7.4

A Non-Moisture Sensitive Caution Label must be placed on each reel bag for devices with an MSL rating of 1. When using a label, place on the bag in such a way as to not interfere with the ability to open the bag. Do not use the label to fold over the reel bag.

The Non-Moisture Sensitive Caution Label must indicate MSL 1 rating and peak package temperature per EIA JEP113 and J-STD-020. The MSL ratings and peak package temperatures for the WJCI devices are located in Table 4 in Section 5.0.

An example of this label is shown in Figure 6.

**Figure 6**



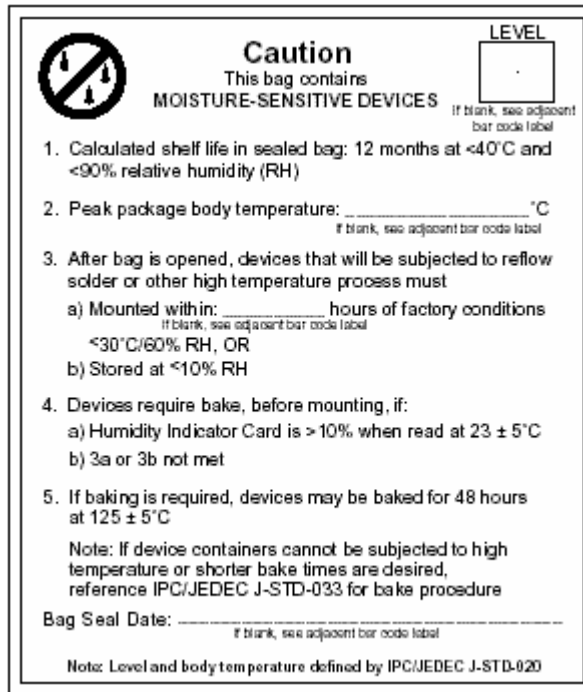
4.7.5

A Moisture-Sensitive Caution Label must be placed on each reel bag for devices with an MSL rating between 2a and 5a. When using a label, place on the bag in such a way as to not interfere with the ability to open the bag. Do not use the label to fold over the reel bag.

The Moisture-Sensitive Caution Label must indicate MSL rating, maximum floor life, bag seal date and peak package temperature per EIA JEP113 and J-STD-020. The MSL ratings and peak package temperatures for the WJCI devices are located in Table 4 in Section 5.0. Maximum floor life for MSL 3 parts is 168 hours. For MSL 2 parts it is 1 year. This information is shown in note 3 a) of the label. The post exposure baking time for all WJ products is 48 hours at 125 ±5°C. This is shown in note 5 of the label.

An example of this label is shown in Figure 7.

**Figure 7**



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**Product Table**

The following table provides a cross reference of the WJCI product model to package type tapes (referenced in Section 4.1), MSL ratings and associated peak package temperatures and standard reel sizes and quantities. If different quantities are required, it will be noted in the purchase order.

**Table 4**

WJCI Model	Package Type Tape	MSL Rating	Peak Package Temperature	Standard reel size	Standard quantity	Residual quantity
AG101	SOT-89	3	240°C	13"/7"	3000(13")	1000/500(7")
<b>AG101-G</b>	SOT-89	3	<b>260°C</b>	13"/7"	3000(13")	1000/500(7")
AG102	SOT-89	3	240°C	13"/7"	3000(13")	1000/500(7")
<b>AG102-G</b>	SOT-89	3	<b>260°C</b>	13"/7"	3000(13")	1000/500(7")
AG103	SOT-89	3	240°C	13"/7"	3000(13")	1000/500(7")
<b>AG103-G</b>	SOT-89	3	<b>260°C</b>	13"/7"	3000(13")	1000/500(7")
AH1	SOT-89	3	240°C	7"	1000	500
<b>AH1-G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
AH1-1	SOT-89	3	240°C	7"	1000	500
<b>AH1-1G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
AH1-2	SOT-89	3	240°C	7"	1000	500
<b>AH1-2G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
AH1-5	SOT-89	3	240°C	7"	1000	500
<b>AH1-5G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
AH1-6	SOT-89	3	240°C	7"	1000	500
<b>AH1-6G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
AH1-7	SOT-89	3	240°C	7"	1000	500
<b>AH1-7G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
AH1-8	SOT-89	3	240°C	7"	1000	500
<b>AH1-8G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
<b>AH1-E</b>	SOT-89	3	240°C	7"	1000	500
<b>AH1-EG</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
AH101	SOT-89	3	240°C	7"	1000	500
<b>AH101-G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
AH102	SOT-89	3	240°C	7"	1000	500
<b>AH102-G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
AH102A	SOT-89	3	240°C	7"	1000	500
<b>AH102A-G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
AH102A-1	SOT-89	3	240°C	7"	1000	500



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WJCI Model	Package Type Tape	MSL Rating	Peak Package Temperature	Standard reel size	Standard quantity	Residual quantity
<b>AH102A-1G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
AH110-89	SOT-89	3	240°C	7"	1000	500
<b>AH110-89G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
AH114-89	SOT-89	3	240°C	7"	1000	500
<b>AH114-89G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
AH118-89	SOT-89	3	240°C	7"	1000	500
<b>AH118-89G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
AH2	SOT-89	3	240°C	7"	1000	500
<b>AH2-G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
AH3	SOT-89	3	240°C	7"	1000	500
<b>AH3-G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
AH31	SOT-89	3	240°C	7"	1000	500
<b>AH31-G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
AM1	SOT-89	3	240°C	7"	1000	500
<b>AM1-G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
AM1-1	SOT-89	3	240°C	7"	1000	500
AM1-2	SOT-89	3	240°C	7"	1000	500
<b>AM1-2G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
FH1	SOT-89	3	240°C	7"	1000	500
<b>FH1-G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
FHF1	SOT-89	3	240°C	7"	1000	500
<b>FHF1-G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
FH101	SOT-89	3	240°C	7"	1000	500
<b>FH101-G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
FP101	SOT-89	3	240°C	7"	1000	500
<b>FP101-G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
FP1189	SOT-89	3	240°C	7"	1000	500
<b>FP1189-G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
FP2189	SOT-89	3	240°C	7"	1000	500
<b>FP2189-G</b>	SOT-89	3	<b>260°C</b>	7"	1000	500
AG402-89	SOT-89	3	240°C	13"/7"	3000(13")	1000/500(7")
<b>AG402-89G</b>	SOT-89	3	<b>260°C</b>	13"/7"	3000(13")	1000/500(7")
AG403-89	SOT-89	3	240°C	13"/7"	3000(13")	1000/500(7")
<b>AG403-89G</b>	SOT-89	3	<b>260°C</b>	13"/7"	3000(13")	1000/500(7")
AG503-89	SOT-89	3	240°C	13"/7"	3000(13")	1000/500(7")
<b>AG503-89G</b>	SOT-89	3	<b>260°C</b>	13"/7"	3000(13")	1000/500(7")
AG602-89	SOT-89	3	240°C	13"/7"	3000(13")	1000/500(7")
<b>AG602-89G</b>	SOT-89	3	<b>260°C</b>	13"/7"	3000(13")	1000/500(7")
AG603-89	SOT-89	3	240°C	13"/7"	3000(13")	1000/500(7")



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WJCI Model	Package Type Tape	MSL Rating	Peak Package Temperature	Standard reel size	Standard quantity	Residual quantity
<b>AG603-89G</b>	SOT-89	3	<b>260°C</b>	13"/7"	3000(13")	1000/500(7")
AG604-89	SOT-89	3	240°C	13"/7"	3000(13")	1000/500(7")
<b>AG604-89G</b>	SOT-89	3	<b>260°C</b>	13"/7"	3000(13")	1000/500(7")
EC1019B	SOT89	3	240°C	7"	1000	500
<b>EC1019B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
EC1078B	SOT89	3	240°C	7"	1000	500
<b>EC1078B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
EC1089B	SOT89	3	240°C	7"	1000	500
<b>EC1089B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
EC1119B	SOT89	3	240°C	7"	1000	500
<b>EC1119B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
ECG001B	SOT89	3	240°C	7"	1000	500
<b>ECG001B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
ECG002B	SOT89	3	240°C	7"	1000	500
<b>ECG002B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
ECG003B	SOT89	3	240°C	7"	1000	500
<b>ECG003B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
ECG004B	SOT89	3	240°C	7"	1000	500
<b>ECG004B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
ECG005B	SOT89	3	240°C	7"	1000	500
<b>ECG005B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
ECG006B	SOT89	3	240°C	7"	1000	500
<b>ECG006B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
ECG008B	SOT89	3	240°C	7"	1000	500
<b>ECG008B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
ECG009B	SOT89	3	240°C	7"	1000	500
<b>ECG009B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
ECG012B	SOT89	3	240°C	7"	1000	500
<b>ECG012B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
ECG014B	SOT89	3	240°C	7"	1000	500
<b>ECG014B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
ECG015B	SOT89	3	240°C	7"	1000	500
<b>ECG015B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
ECG040B	SOT89	3	240°C	7"	1000	500
<b>ECG040B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
ECG050B	SOT89	3	240°C	7"	1000	500
<b>ECG050B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
ECG055B	SOT89	3	240°C	7"	1000	500
<b>ECG055B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
ECG099B	SOT89	3	240°C	7"	1000	500



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WJCI Model	Package Type Tape	MSL Rating	Peak Package Temperature	Standard reel size	Standard quantity	Residual quantity
<b>ECG099B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
SCG002B	SOT89	3	240°C	7"	1000	500
<b>SCG002B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
SCG015B	SOT89	3	240°C	7"	1000	500
<b>SCG015B-G</b>	SOT89	3	<b>260°C</b>	7"	1000	500
AG606	SOIC8	3	240°C	7"	500	100
<b>AG606-G</b>	SOIC8	2	<b>260°C</b>	7"	500	100
MH1	SOIC8	3	240°C	7"	500	100
MH1A	SOIC8	3	240°C	7"	500	100
<b>MH1A-G</b>	SOIC8	2	<b>260°C</b>	7"	500	100
MH101	SOIC8	3	240°C	7"	500	100
MH102	SOIC8	3	240°C	7"	500	100
MH103A	SOIC8	3	240°C	7"	500	100
<b>MH103A-G</b>	SOIC8	2	<b>260°C</b>	7"	500	100
<b>MH201A-G</b>	SOIC8	2	<b>260°C</b>	7"	500	100
MH203	SOIC8	3	240°C	7"	500	100
MH203A	SOIC8	3	240°C	7"	500	100
<b>MH203A-G</b>	SOIC8	2	<b>260°C</b>	7"	500	100
MH205	SOIC8	3	240°C	7"	500	100
MH205A	SOIC8	3	240°C	7"	500	100
<b>MH205A-G</b>	SOIC8	2	<b>260°C</b>	7"	500	100
AH11	SOIC8	1	240°C	7"	500	100
<b>AH11-G</b>	SOIC8	2	<b>260°C</b>	7"	500	100
AH22	SOIC8	1	240°C	7"	500	100
AH22A	SOIC8	1	240°C	7"	500	100
AH22N	SOIC8	1	240°C	7"	500	100
AH22S	SOIC8	1	240°C	7"	1000	500
<b>AH22S-G</b>	SOIC8	2	<b>260°C</b>	7"	1000	500
<b>AH103A-G</b>	SOIC8	2	<b>260°C</b>	7"	500	100
AH115-S8	SOIC8	3	240°C	7"	500	100
<b>AH115-S8G</b>	SOIC8	2	<b>260°C</b>	7"	500	100
AH116-S8	SOIC8	3	240°C	7"	500	100
<b>AH116-S8G</b>	SOIC8	2	<b>260°C</b>	7"	500	100
AH215-S8	SOIC8	3	240°C	7"	1000	500
<b>AH215-S8G</b>	SOIC8	2	<b>260°C</b>	7"	1000	500
AH312-S8	SOIC8	3	240°C	7"	1000	500
<b>AH312-S8G</b>	SOIC8	2	<b>260°C</b>	7"	1000	500
ECP050G	SOIC8	3	240°C	7"	500	100



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WJCI Model	Package Type Tape	MSL Rating	Peak Package Temperature	Standard reel size	Standard quantity	Residual quantity
<b>ECP050G-G</b>	SOIC8	2	<b>260°C</b>	7"	500	100
ECP052G	SOIC8	3	240°C	7"	500	100
<b>ECP052G-G</b>	SOIC8	2	<b>260°C</b>	7"	500	100
ECP053G	SOIC8	3	240°C	7"	500	100
<b>ECP053G-G</b>	SOIC8	2	<b>260°C</b>	7"	500	100
ECP100G	SOIC8	3	240°C	7"	500	100
<b>ECP100G-G</b>	SOIC8	2	<b>260°C</b>	7"	500	100
ECP103G	SOIC8	3	240°C	7"	500	100
<b>ECP103G-G</b>	SOIC8	2	<b>260°C</b>	7"	500	100
ECP200G	SOIC8	3	240°C	7"	500	100
<b>ECP200G-G</b>	SOIC8	2	<b>260°C</b>	7"	500	100
ECP203G	SOIC8	3	240°C	7"	500	100
<b>ECP203G-G</b>	SOIC8	2	<b>260°C</b>	7"	500	100
AH4	3x3 LGA	N/A	N/A	7"	500	300
AP3	3x3 LGA	N/A	N/A	7"	500	300
AP4	3x3 LGA	N/A	N/A	7"	500	300
AH201	QFN 6x6	1	240°C	7"	500	100
AH202-F	QFN 6x6	2	<b>260°C</b>	7"	500	100
CV110-1	QFN 6x6	1	250°C	7"	500	100
<b>CV110-1F</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
<b>CV110-1AF</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
<b>CV110-2AF</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
<b>CV110-3AF</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
CV111-1	QFN 6x6	1	250°C	7"	500	100
<b>CV111-1F</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
<b>CV111-1AF</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
CV111-2	QFN 6x6	1	250°C	7"	500	100
<b>CV111-2F</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
CV111-3	QFN 6x6	1	250°C	7"	500	100
<b>CV111-3F</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
<b>CV111-3AF</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
CV210-1	QFN 6x6	1	250°C	7"	500	100
<b>CV210-1F</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
<b>CV210-1AF</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
CV210-101	QFN 6x6	1	250°C	7"	500	100
CV210-102	QFN 6x6	1	250°C	7"	500	100
<b>CV210-102F</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
<b>CV210-102AF</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100



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WJCI Model	Package Type Tape	MSL Rating	Peak Package Temperature	Standard reel size	Standard quantity	Residual quantity
CV210-2	QFN 6x6	1	250°C	7"	500	100
<b>CV210-2F</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
<b>CV210-2AF</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
CV210-201	QFN 6x6	1	250°C	7"	500	100
<b>CV210-201F</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
CV210-203	QFN 6x6	1	250°C	7"	500	100
<b>CV210-203AF</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
CV210-3	QFN 6x6	1	250°C	7"	500	100
<b>CV210-3F</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
<b>CV210-3AF</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
CV210-301	QFN 6x6	1	250°C	7"	500	100
<b>CV210-301F</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
<b>CV210-301AF</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
CV211-1	QFN 6x6	1	250°C	7"	500	100
<b>CV211-1F</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
<b>CV211-1AF</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
CV211-101	QFN 6x6	1	250°C	7"	500	100
<b>CV211-101F</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
<b>CV211-101AF</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
CV211-103	QFN 6x6	1	250°C	7"	500	100
<b>CV211-103F</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
<b>CV211-103AF</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
CV211-2	QFN 6x6	1	250°C	7"	500	100
<b>CV211-2F</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
<b>CV211-2AF</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
CV211-201	QFN 6x6	1	250°C	7"	500	100
<b>CV211-201F</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
<b>CV211-201AF</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
CV211-3	QFN 6x6	1	250°C	7"	500	100
<b>CV211-3F</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
FP31QF	QFN 6x6	1	250°C	7"	500	100
<b>FP31QF-F</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
VG101	QFN 6x6	1	250°C	7"	500	100
<b>VG101-F</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
VG111	QFN 6x6	1	250°C	7"	500	100
<b>VG111-F</b>	QFN 6x6	2	<b>260°C</b>	7"	500	100
ECP050D	QFN4X4	3	240°C	7"	500	100
ECP050D-1	QFN4X4	3	240°C	7"	500	100
<b>ECP050D-G</b>	QFN4X4	2	<b>260°C</b>	7"	500	100
<b>ECP050D-1G</b>	QFN4X4	2	<b>260°C</b>	7"	500	100



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WJCI Model	Package Type Tape	MSL Rating	Peak Package Temperature	Standard reel size	Standard quantity	Residual quantity
ECP052D	QFN4X4	3	240°C	7"	500	100
<b>ECP052D-G</b>	QFN4X4	2	<b>260°C</b>	7"	500	100
ECP053D	QFN4X4	3	240°C	7"	500	100
<b>ECP053D-G</b>	QFN4X4	2	<b>260°C</b>	7"	500	100
ECP100D	QFN4X4	3	240°C	7"	500	100
<b>ECP100D-G</b>	QFN4X4	2	<b>260°C</b>	7"	500	100
ECP103D	QFN4X4	3	240°C	7"	500	100
<b>ECP103D-G</b>	QFN4X4	2	<b>260°C</b>	7"	500	100
ECP200D	QFN4X4	3	240°C	7"	500	100
<b>ECP200D-G</b>	QFN4X4	2	<b>260°C</b>	7"	500	100
ECP203D	QFN4X4	3	240°C	7"	500	100
<b>ECP203D-G</b>	QFN4X4	2	<b>260°C</b>	7"	500	100
FM03P	SOT-143	N/A	240°C	7"	1000	500
445372-001	SOT-143	N/A	240°C	7"	1000	500
445372-002	SOT-143	N/A	240°C	7"	1000	500
HMJ1	J-PAK-18	N/A	N/A	13"	400	200
HMJ2	J-PAK-18	N/A	N/A	13"	400	200
HMJ4	J-PAK-18	N/A	N/A	13"	400	200
HMJ8	J-PAK-18	N/A	N/A	13"	400	200
HMJ5	J-PAK-22	N/A	N/A	13"	400	200
HMJ7	J-PAK-22	N/A	N/A	13"	400	200
HMJ7-1	J-PAK-22	N/A	N/A	13"	400	200
HMJ9	J-PAK-22	N/A	N/A	13"	400	200
SME	S-PAK-3	N/A	N/A	13"	500	200
AG201-63	SOT-363	1	240°C	7"	3000	1000/500
<b>AG201-63G</b>	SOT-363	3	<b>260°C</b>	7"	3000	1000/500
AG202-63	SOT-363	1	240°C	7"	3000	1000/500
<b>AG202-63G</b>	SOT-363	3	<b>260°C</b>	7"	3000	1000/500
AG203-63	SOT-363	1	240°C	7"	3000	1000/500
<b>AG203-63G</b>	SOT-363	3	<b>260°C</b>	7"	3000	1000/500
AG302-63	SOT-363	1	240°C	7"	3000	1000/500
<b>AG302-63G</b>	SOT-363	3	<b>260°C</b>	7"	3000	1000/500
AG303-63	SOT-363	1	240°C	7"	3000	1000/500



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WJCI Model	Package Type Tape	MSL Rating	Peak Package Temperature	Standard reel size	Standard quantity	Residual quantity
AG303-63G	SOT-363	3	260°C	7"	3000	1000/500
ECG001F	SOT-363	3	240°C	7"	3000	1000/500
ECG001F-G	SOT-363	3	260°C	7"	3000	1000/500
ECG002F	SOT-363	3	240°C	7"	3000	1000/500
ECG002F-G	SOT-363	3	260°C	7"	3000	1000/500
ECG004F	SOT-363	3	240°C	7"	3000	1000/500
ECG004F-G	SOT-363	3	260°C	7"	3000	1000/500
ECG006F	SOT-363	3	240°C	7"	3000	1000/500
ECG006F-G	SOT-363	3	260°C	7"	3000	1000/500
AG201-86	SOT-86	1	240°C	13"/7"	3000(13")	1000/500(7")
AG201-86G	SOT-86	3	260°C	13"/7"	3000(13")	1000/500(7")
AG202-86	SOT-86	1	240°C	13"/7"	3000(13")	1000/500(7")
AG202-86G	SOT-86	3	260°C	13"/7"	3000(13")	1000/500(7")
AG203-86	SOT-86	1	240°C	13"/7"	3000(13")	1000/500(7")
AG203-86G	SOT-86	3	260°C	13"/7"	3000(13")	1000/500(7")
AG302-86	SOT-86	1	240°C	13"/7"	3000(13")	1000/500(7")
AG302-86G	SOT-86	3	260°C	13"/7"	3000(13")	1000/500(7")
AG303-86	SOT-86	1	240°C	13"/7"	3000(13")	1000/500(7")
AG303-86G	SOT-86	3	260°C	13"/7"	3000(13")	1000/500(7")
AG402-86	SOT-86	1	240°C	13"/7"	3000(13")	1000/500(7")
AG402-86G	SOT-86	3	260°C	13"/7"	3000(13")	1000/500(7")
AG403-86	SOT-86	1	240°C	13"/7"	3000(13")	1000/500(7")
AG403-86G	SOT-86	3	260°C	13"/7"	3000(13")	1000/500(7")
AG503-86	SOT-86	1	240°C	13"/7"	3000(13")	1000/500(7")
AG503-86G	SOT-86	3	260°C	13"/7"	3000(13")	1000/500(7")
AG602-86	SOT-86	1	240°C	13"/7"	3000(13")	1000/500(7")
AG602-86G	SOT-86	3	260°C	13"/7"	3000(13")	1000/500(7")
AG603-86	SOT-86	1	240°C	13"/7"	3000(13")	1000/500(7")
AG603-86G	SOT-86	3	260°C	13"/7"	3000(13")	1000/500(7")
AG604-86	SOT-86	1	240°C	13"/7"	3000(13")	1000/500(7")
AG604-86G	SOT-86	3	260°C	13"/7"	3000(13")	1000/500(7")
EC1019C	SOT-86	1	240°C	7"	1000	500
EC1019C-G	SOT-86	3	260°C	7"	1000	500
EC1078C	SOT-86	1	240°C	7"	1000	500
EC1078C-G	SOT-86	3	260°C	7"	1000	500
EC1119C	SOT-86	1	240°C	7"	1000	500
EC1119C-G	SOT-86	3	260°C	7"	1000	500
ECG001C	SOT-86	1	240°C	7"	1000	500



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WJCI Model	Package Type Tape	MSL Rating	Peak Package Temperature	Standard reel size	Standard quantity	Residual quantity
<b>ECG001C-G</b>	SOT-86	3	<b>260°C</b>	7"	1000	500
ECG002C	SOT-86	1	240°C	7"	1000	500
<b>ECG002C-G</b>	SOT-86	3	<b>260°C</b>	7"	1000	500
ECG004C	SOT-86	1	240°C	7"	1000	500
<b>ECG004C-G</b>	SOT-86	3	<b>260°C</b>	7"	1000	500
ECG005C	SOT-86	1	240°C	7"	1000	500
<b>ECG005C-G</b>	SOT-86	3	<b>260°C</b>	7"	1000	500
ECG006C	SOT-86	1	240°C	7"	1000	500
<b>ECG006C-G</b>	SOT-86	3	<b>260°C</b>	7"	1000	500
ECG040C	SOT-86	1	240°C	7"	1000	500
<b>ECG040C-G</b>	SOT-86	3	<b>260°C</b>	7"	1000	500
ECG050C	SOT-86	1	240°C	7"	1000	500
<b>ECG050C-G</b>	SOT-86	3	<b>260°C</b>	7"	1000	500
ECG055C	SOT-86	1	240°C	7"	1000	500
<b>ECG055C-G</b>	SOT-86	3	<b>260°C</b>	7"	1000	500
MH301	DFN 3x3	1	240°C	7"	1000	500
MH302	DFN 3x3	1	240°C	7"	1000	500
MH303	DFN 3x3	1	240°C	7"	1000	500
<b>MH303-G</b>	DFN 3x3	1	<b>260°C</b>	7"	1000	500



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