

Power Transistors in Small Signal Packages



features

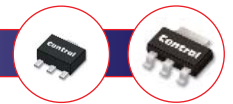
- Bipolar power devices normally in DPAK, now in Tiny Small Signal SOT-223 & SOT-89 packages.
- The SOT-223 utilizes 28% less board space and has a 23% lower profile (1.8mm) than a DPAK (2.35mm).
- The SOT-89 utilizes 69% less board space and has a 28% lower profile (1.7mm) than a DPAK (2.35mm).

description

The Central Semiconductor Power Transistors provide superior performance and specifications, in small surface mount packages traditionally used for small signal applications.

For further information on these products contact Sales at Central Semiconductor at (631) 435-1110.

selection guide power transistors



Bipolar Power Transistors in SOT-223.

The Power 223 family of discrete semiconductors have been manufactured to utilize less board space compared to the DPAK. SOT-223 also mounts directly on existing DPAK solder pads to offer a lower profile.



TYPE NO.		Description	I _C (A) MAX	P _D (W)	BV _{CBO} (V) MIN	BV _{CEO} (V) MIN	h _{FE}		I _C (A)	V _{CE(SAT)} @ I _C		f _T (MHz) MIN
NPN	PNP						MIN	MAX		V (V) MAX	(A) MAX	
CZT31C	CZT32C	Amplifier/Switch	3.0	2.0	100	100	10	100	3.0	1.2	3.0	3.0
CZT122	CZT127	Darlington	5.0	2.0	100	100	1,000	--	3.0	4.0	5.0	4.0
CZT3055	CZT2955	Amplifier/Switch	6.0	2.0	100	60	20	70	4.0	1.1	4.0	2.5
CZT5338		High Current Switch	5.0	2.0	100	100	30	120	2.0	1.2	5.0	30
CZT3150		High Current Switch	5.0	2.0	50	25	150	--	2.0	0.5	4.0	150 [†]
CZT2680		Amplifier/Switch	1.5	2.0	250	200	15	--	1.0	0.5	1.0	80 [†]
CZTA44HC		High Current Switch	2.0	2.0	450	400	30	--	1.0	0.5	1.0	10

Bipolar Power Transistors in SOT-89.

World's smallest 5 Amp Power Transistor

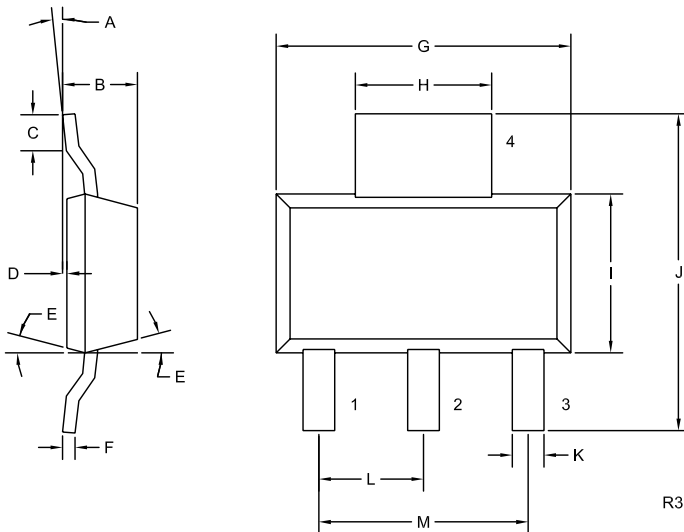


TYPE NO.		Description	I _C (A) MAX	P _D (W)	BV _{CBO} (V) MIN	BV _{CEO} (V) MIN	h _{FE}		I _C (A)	V _{CE(SAT)} @ I _C		f _T (MHz) MIN
NPN	PNP						MIN	MAX		V (V) MAX	(A) MAX	
CXT3150	--	High Current Switch	5.0	1.2	50	25	150	--	2.0	0.5	4.0	150 [†]

† Typical

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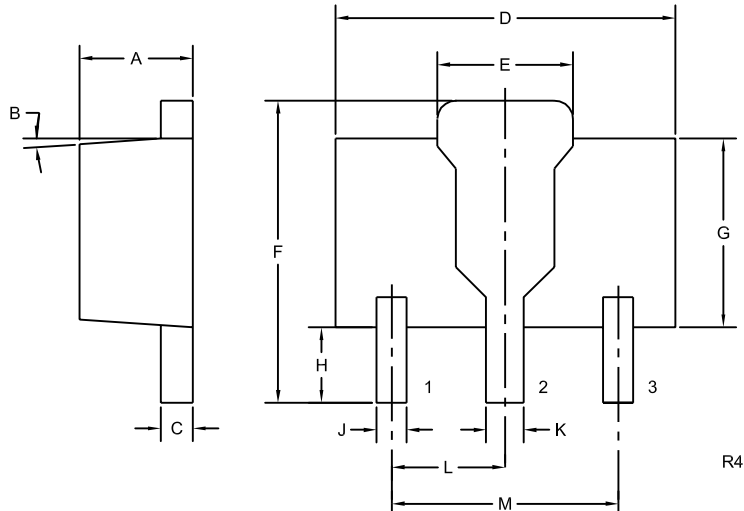
Mechanical Specifications - SOT-223



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0°	10°	0°	10°
B	0.059	0.071	1.50	1.80
C	0.018	---	0.45	---
D	0.000	0.004	0.00	0.10
E	15°		15°	
F	0.009	0.014	0.23	0.35
G	0.248	0.264	6.30	6.70
H	0.114	0.122	2.90	3.10
I	0.130	0.146	3.30	3.70
J	0.264	0.287	6.70	7.30
K	0.024	0.033	0.60	0.85
L	0.091		2.30	
M	0.181		4.60	

SOT-223 (REV: R3)

Mechanical Specifications - SOT-89



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.055	0.067	1.40	1.70
B	4°		4°	
C	0.014	0.018	0.35	0.46
D	0.173	0.185	4.40	4.70
E	0.064	0.074	1.62	1.87
F	0.146	0.177	3.70	4.50
G	0.090	0.106	2.29	2.70
H	0.028	0.051	0.70	1.30
J	0.014	0.019	0.36	0.48
K	0.017	0.023	0.44	0.58
L	0.059		1.50	
M	0.118		3.00	

SOT-89 (REV: R4)

For more information on this product please visit our website at www.centalsemi.com

CentralTM
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*Innovations in Discrete
Semiconductors*

For further information contact:
Sales at Central Semiconductor Corp.
(631) 435-1110 or visit our website at:
www.centalsemi.com

145 Adams Avenue • Hauppauge • New York • 11788 • USA • Tel:(631) 435-1110 • Fax: (631) 435-1824

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