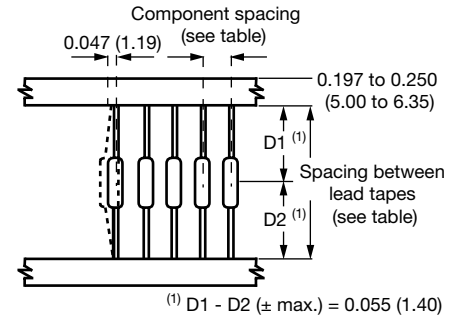
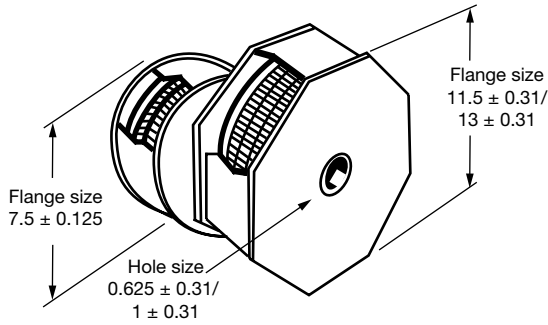


## Resistor Packaging

### LEADED FILM TAPE AND REEL PACKAGING



MODEL	SIZE	PACKAGING CODE		DIMENSIONS IN INCHES (mm)				PACKAGING UNIT <sup>(2)</sup> (Pieces)
		LEAD (Pb)-BEARING	LEAD (Pb)-FREE	FLANGE SIZE	HOLE SIZE	PITCH ± 0.020" (0.50)	TAPE SPACING ± 0.079" (2.00)	
CCF	50	R36	E36	11.5	0.625	0.200 (5.08)	2.063 (52.40)	5000
	60, 2	R36	E36	11.5	0.625	0.200 (5.08)	2.063 (52.40)	2500
CMF	50, 55, 07	RE	EA	11.5	0.625	0.200 (5.08)	2.063 (52.40)	5000
		R6	EB	7.5	0.625	0.200 (5.08)	2.063 (52.40)	1000
	60, 20	RE	EA	11.5	0.625	0.200 (5.08)	2.063 (52.40)	2500
		R6	EB	7.5	0.625	0.200 (5.08)	2.063 (52.40)	1000
	65, 70	RE	EA	11.5	0.625	0.200 (5.08)	2.063 (52.40)	2500
		R6	EB	11.5	0.625	0.200 (5.08)	2.063 (52.40)	1000
CMF (Military RL)	07	R36	n/a	11.5	0.625	0.200 (5.08)	2.063 (52.40)	5000
		RE6	n/a	7.5	0.625	0.200 (5.08)	2.063 (52.40)	1000
		RSL	n/a	7.5 <sup>(1)</sup>	0.625	0.200 (5.08)	2.063 (52.40)	500 min. to 5000 max.
	20	R36	n/a	11.5	0.625	0.200 (5.08)	2.063 (52.40)	2500
		RE6	n/a	7.5	0.625	0.200 (5.08)	2.063 (52.40)	1000
		RSL	n/a	7.5 <sup>(1)</sup>	0.625	0.200 (5.08)	2.063 (52.40)	500 min. to 2500 max.
CMF (Military RN)	50, 55	R36	n/a	11.5	0.625	0.200 (5.08)	2.063 (52.40)	5000
		RE6	n/a	7.5	0.625	0.200 (5.08)	2.063 (52.40)	1000
		RSL	n/a	7.5 <sup>(1)</sup>	0.625	0.200 (5.08)	2.063 (52.40)	500 min. to 5000 max.
	60	R36	n/a	11.5	0.625	0.200 (5.08)	2.063 (52.40)	2500
		RE6	n/a	7.5	0.625	0.200 (5.08)	2.063 (52.40)	1000
		RSL	n/a	7.5 <sup>(1)</sup>	0.625	0.200 (5.08)	2.063 (52.40)	500 min. to 2500 max.
	65, 70	R36	n/a	11.5	0.625	0.200 (5.08)	2.063 (52.40)	2500
		RE6	n/a	11.5	0.625	0.200 (5.08)	2.063 (52.40)	1000
		RSL	n/a	11.5 <sup>(1)</sup>	0.625	0.200 (5.08)	2.063 (52.40)	500 min. to 2500 max.
CPF	1	R36	E36	11.5	0.625	0.200 (5.08)	2.063 (52.40)	5000
		RE6	EE6	7.5	0.625	0.200 (5.08)	2.063 (52.40)	1000
	2, 3	R36	E36	11.5	0.625	0.200 (5.08)	2.063 (52.40)	2500
		RE6	EE6	7.5	0.625	0.200 (5.08)	2.063 (52.40)	1000

# Through Hole Resistor Packaging



Vishay

Resistor Packaging

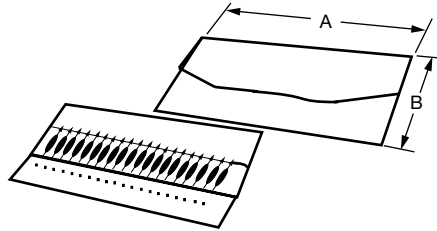
LEADED FILM TAPE AND REEL PACKAGING (Continued)								
MODEL	SIZE	PACKAGING CODE		DIMENSIONS IN INCHES (mm)				PACKAGING UNIT <sup>(2)</sup> (Pieces)
		LEAD (Pb)- BEARING	LEAD (Pb)- FREE	FLANGE SIZE	HOLE SIZE	PITCH ± 0.020" (0.50)	TAPE SPACING ± 0.079" (2.00)	
ERC (Military RNC/RNR)	50, 55, 60	R36	n/a	11.5	0.625	0.200 (5.08)	2.063 (52.40)	5000
		RE6	n/a	7.5	0.625	0.200 (5.08)	2.063 (52.40)	1000
		RSL	n/a	7.5 <sup>(1)</sup>	0.625	0.200 (5.08)	2.063 (52.40)	500 min. to 5000 max.
	65, 70	R64	n/a	11.5	0.625	0.200 (5.08)	2.875 (73.03)	2500
		RE6	n/a	7.5	0.625	0.200 (5.08)	2.875 (73.03)	1000
		RSL	n/a	7.5 <sup>(1)</sup>	0.625	0.200 (5.08)	2.875 (73.03)	500 min. to 2500 max.
ERL (Military RLR)	05, 07	R36	n/a	11.5	0.625	0.200 (5.08)	2.063 (52.40)	5000
		RE6	n/a	7.5	0.625	0.200 (5.08)	2.063 (52.40)	1000
		RSL	n/a	7.5 <sup>(1)</sup>	0.625	0.200 (5.08)	2.063 (52.40)	500 min. to 5000 max.
	20	R36	n/a	11.5	0.625	0.200 (5.08)	2.063 (52.40)	2500
		RE6	n/a	7.5	0.625	0.200 (5.08)	2.063 (52.40)	1000
		RSL	n/a	7.5 <sup>(1)</sup>	0.625	0.200 (5.08)	2.063 (52.40)	500 min. to 2500 max.
	32	R64	n/a	11.5	0.625	0.200 (5.08)	2.875 (73.03)	2500
		RE6	n/a	7.5	0.625	0.200 (5.08)	2.875 (73.03)	1000
		RSL	n/a	7.5 <sup>(1)</sup>	0.625	0.200 (5.08)	2.875 (73.03)	500 min. to 2500 max.
FP	1/2, 1/2P, 1, 1P, 32	CJ	EA	11.5	1	0.200 (5.08)	2.875 (73.03)	1000
	2, 2P, 3, 3P, 42, 67	CH	EA	11.5	1	0.400 (10.16)	2.875 (73.03)	750
	4	G1	EA	13	1	0.400 (10.16)	4.000 (101.60)	600
	69, 69P	CJ	EA	11.5	1	0.400 (10.16)	2.875 (73.03)	1000
FRJ	50	R36	E36	11.5	0.625	0.200 (5.08)	2.063 (52.40)	5000
GSR	55, 57, 60	CS	n/a	7.5	0.625	0.200 (5.08)	2.063 (52.40)	100 min. to 300 max.
	65, 70, 75	CT	n/a	7.5	0.625	0.375 (9.53)	2.875 (73.03)	100 min. to 200 max.
HDN (Military RNR/RNN)	55, 57, 60	RJ7, RSL	n/a	7.5	0.625	0.200 (5.08)	2.063 (52.40)	100 min. to 300 max.
	65, 70, 75	RJ8, RSL	n/a	7.5	0.625	0.375 (9.53)	2.875 (73.03)	100 min. to 200 max.
HVW, HVX	1/2, 3/4	RC	EE	11.5	0.625	0.200 (5.08)	2.500 (63.50)	2500
MVW	1/2, 3/4	n/a	RC	11.5	0.625	0.200 (5.08)	2.500 (63.50)	2500
PTF	51, 56	RE	EA	11.5	0.625	0.200 (5.08)	2.063 (52.40)	5000
		R6	EB	7.5	0.625	0.200 (5.08)	2.063 (52.40)	1000
	65	RE	EA	11.5	0.625	0.200 (5.08)	2.063 (52.40)	2500
		R6	EB	7.5	0.625	0.200 (5.08)	2.063 (52.40)	1000
RNX	1/4, 3/8, 1/2, 3/4, 1	RC	EE	11.5	0.625	0.200 (5.08)	2.500 (63.50)	1000
ROX	1/2, 3/4, 1	RF	EE	13	0.625	0.400 (10.16)	2.500 (63.50)	1000

**Notes**

<sup>(1)</sup> Flange size will be based on the quantity of parts in the reel

<sup>(2)</sup> Ultra tight tolerance (0.01 % and 0.02 %) and single lot date codes have lower minimum and maximum quantities

## LEADED FILM LACER PACKAGING



MODEL	SIZE	PACKAGING CODE		DIMENSIONS IN INCHES (Typical)		PACKAGING UNIT (Pieces)
		LEAD (Pb)-BEARING	LEAD (Pb)-FREE	A	B	
FP	4, 5, 7, 10	LB	EL	14.8	6	20
HVW, HVX	1/2	LB	EL	8.5	3.75	20
	3/4	LB	EL	8.5	4	20
MVW	1/2	n/a	LB	8.5	3.75	20
	3/4	n/a	LB	8.5	4	20
RNX	1/4, 3/8	LB	EL	8.5	3.75	20
	1/2, 3/4	LB	EL	8.5	4	20
	1, 1-1/4, 1-1/2	LB	EL	11	5	20
	2	LB	EL	14.8	6	20
ROX	1/2	LB	EL	8.5	4	20
	3/4, 1, 1-1/2	LB	EL	11	5	20
	2	LB	EL	14.8	6	20

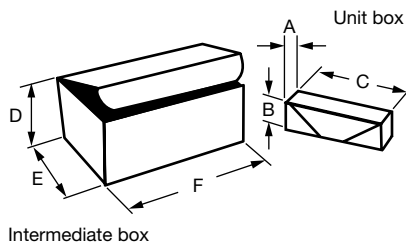
## LEADED FILM FOIL PACKAGING

MODEL	SIZE	PACKAGING CODE		PACKAGING UNIT <sup>(1)</sup> (Pieces)
		LEAD (Pb)-BEARING	LEAD (Pb)-FREE	
GSR	55, 57, 60, 65, 70	MR	n/a	25
	75	MS	n/a	1
HDN (Military RNR/RNN)	55, 57, 60, 65, 70	M76, BSL	n/a	25
	75	M77, BSL	n/a	1

**Note**

<sup>(1)</sup> Units are packaged in heat-sealed antistatic foil bags

## LEADED FILM BULK PACKAGING



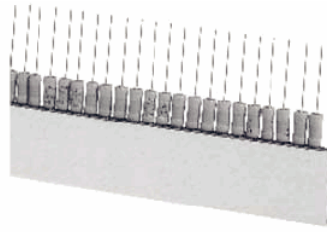
MODEL	SIZE	PACKAGING CODE		DIMENSIONS IN INCHES (Typical)						PACKAGING UNIT <sup>(1)</sup> (Pieces)
		LEAD (Pb)-BEARING	LEAD (Pb)-FREE	A	B	C	D	E	F	
CMF	50, 55, 07	BF	EK	1	1	3.625	2.25	3.75	5.375	100
	60, 20	BF	EK	1.5	1.5	3.625	3.25	3.75	8.25	100
	65, 70	BF	EK	2	2	3.875	4.25	4	10.375	100
CMF (Military RL)	07	B14, BSL	n/a	1	1	3.625	2.25	3.75	5.375	100
	20	B14, BSL	n/a	1.5	1.5	3.625	3.25	3.75	8.25	100
CMF (Military RN)	50, 55	B14, BSL	n/a	1	1	3.625	2.25	3.75	5.375	100
	60	B14, BSL	n/a	1.5	1.5	3.625	3.25	3.75	8.25	100
	65, 70	B14, BSL	n/a	2	2	3.875	4.25	4	10.375	100
CPF	1	B14	E14	1	1	3.625	2.25	3.75	5.375	100
	2	B14	E14	1.5	1.5	3.625	3.25	3.75	8.25	100
	3	B14	E14	2	2	3.875	4.25	4	10.375	100
DPW, GPW		B19	E19 <sup>(2)</sup>	n/a	n/a	n/a	8	12.125	12.125	12 max.
DPX, GPX		B19	E19 <sup>(2)</sup>	n/a	n/a	n/a	6.875	13.375	13.375	12 max.
DVY, GVY		B19	E19 <sup>(2)</sup>	n/a	n/a	n/a	10.5	15.5	16.75	12 max.
DZW, GZW		B19	E19 <sup>(2)</sup>	n/a	n/a	n/a	13.125	12.125	12.125	12 max.
DZZ, GZZ		B19	E19 <sup>(2)</sup>	n/a	n/a	n/a	11.5	15.31	22.375	12 max.
ERC (Military RNC/RNR)	50, 55, 60	B14, BSL	n/a	1	1	3.625	2.25	3.75	5.375	100
	60	B14, BSL	n/a	1.5	1.5	3.625	3.25	3.75	8.25	100
	65, 70	B14, BSL	n/a	2	2	3.875	4.25	4	10.375	100
ERL (Military RLR)	05, 07	B14, BSL	n/a	1	1	3.625	2.25	3.75	5.375	100
	20	B14, BSL	n/a	1.5	1.5	3.625	3.25	3.75	8.25	100
	32	B14, BSL	n/a	2	2	3.875	4.25	4	10.375	100
HVW, HVX	1/2, 3/4	BJ	EK	n/a	n/a	n/a	4.25	4	10.375	100
MVW	1/2, 3/4	-	BJ	n/a	n/a	n/a	4.25	4	10.375	100
PTF	51, 56	BF	EK	1	1	3.625	2.25	3.75	5.375	100
	65	BF	EK	1.5	1.5	3.625	3.25	3.75	8.25	100
TAEW, TAFW, TAKW, TAOW, TAQW, TARW		B22	E22 <sup>(2)</sup>	n/a	n/a	n/a	3.25	3.75	8.25	100

### Notes

<sup>(1)</sup> Ultra tight tolerance (0.01 % and 0.02 %) and single lot date codes have lower minimum and maximum quantities

<sup>(2)</sup> Although lead (Pb)-free packaging codes are assigned, the lead (Pb)-free version of the product has not yet been released

### LEADED FILM STRIP PACKAGING



MODEL	SIZE	PACKAGING CODE		PACKAGING UNIT (Pieces)	
		LEAD (Pb)-BEARING	LEAD (Pb)-FREE	PIECES PER STRIP	STRIPS PER BOX
FHV	075, 100, 150, 160, 200, 400, 500	RS	ES		
FP	1/2, 1/2P, 1, 1P, 32	B8	EK	34	10
	2, 2P, 3, 3P, 42, 67, 69, 69P	B8	EK	25	10
TR	03, 05, 10, 15, 20, 30	RS	ES		

### LEADED FILM BAG PACKAGING

MODEL	SIZE	PACKAGING CODE		PACKAGING UNIT <sup>(1)</sup> (Pieces)
		LEAD (Pb)-BEARING	LEAD (Pb)-FREE	
FHV	075, 100, 150, 160, 200, 400, 500	RB	EB	100 min.
TR	03, 05, 10, 15, 20, 30	RB	EB	100 min.

**Note**

<sup>(1)</sup> Units are packaged in poly bags

### LEADED FILM FOAM WRAP PACKAGING

MODEL	SIZE	PACKAGING CODE		PACKAGING UNIT <sup>(3)</sup> (Pieces)
		LEAD (Pb)-BEARING	LEAD (Pb)-FREE	
BAEW, BAKW, BBF, BBFW, BBM, BBMW, BBR, BBRW, BBV, BFQ, BFT, BFW		F08	E08 <sup>(2)</sup>	5
RJU	40, 50, 70, 95, 140, 150, 275, 400	F07	E07 <sup>(2)</sup>	1
ROX	3, 4, 5, 6	F5	EM	5

**Notes**

<sup>(2)</sup> Although lead (Pb)-free packaging codes are assigned, the lead (Pb)-free version of the product has not yet been released

<sup>(3)</sup> Resistors (individually or in groups) are rolled in sheet foam for protection. Typically used for large resistors and assemblies

### LEADED FILM SKIN PACKAGING

MODEL	SIZE	PACKAGING CODE		PACKAGING UNIT <sup>(5)</sup> (Pieces)
		LEAD (Pb)-BEARING	LEAD (Pb)-FREE	
DJU, GJU		J03	E03 <sup>(4)</sup>	1
RDX	2, 3, 4, 5, 6, 7	J03	E03 <sup>(4)</sup>	1

**Notes**

<sup>(4)</sup> Although lead (Pb)-free packaging codes are assigned, the lead (Pb)-free version of the product has not yet been released

<sup>(5)</sup> A versatile packaging method. Units are placed on double-faced corrugated board, then skin packaged with polyfilm