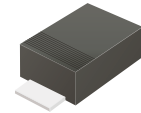
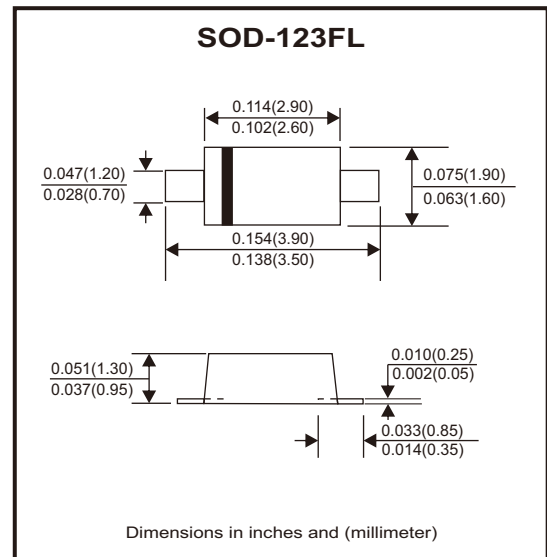


CZRMF4734A-HF Thru. CZRMF1330A-HF**Zener Voltage: 5.6V to 330V****DC Power: 1 W****RoHS Device****Halogen Free****Features**

- Glass passivated chip.
- Low leakage current.
- Built-in strain relief.
- Low inductance.
- High peak reverse power dissipation.
- For use in stabilizing and clipping with high power rating.

Mechanical data

- Case: SOD-123FL, molded plastic.
- Terminal: Solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end except bipolar.
- Mounting position: Any.

**Circuit Diagram****Maximum Rating** (at $T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Conditions	Symbol	Value	Unit
DC power dissipation	$T_L = 50^{\circ}\text{C}$	P_D	1	W
Forward voltage	$I_F = 200\text{mA}$	V_F	1.2	V
Thermal resistance	Junction to ambient air (Note)	$R_{\theta JA}$	170	K/W
Operating junction temperature range		T_J	-55 to +150	$^{\circ}\text{C}$
Storage temperature range		T_{STG}	-55 to +175	$^{\circ}\text{C}$

Note: Valid provided that leads are kept at ambient temperature at a distance of 10mm from case.

Electrical Characteristics (at T_A=25°C unless otherwise specified)

Part No	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current	Maximum Surge Current	Marking Code
	V _Z @I _{ZT} (V)	I _{ZT} (mA)	Z _{ZT} @I _{ZT} (Ω)	Z _{ZK} @I _{ZK} (Ω)	I _{ZK} (mA)	I _R (μA)	V _R (V)	I _{ZM} (mA)	I _{RM} (mA)	
CZRMF4734A-HF	5.6	45.0	5.0	600	1.00	10.0	2.0	161.0	805	34A, FHL
CZRMF4735A-HF	6.2	41.0	2.0	700	1.00	10.0	3.0	146.0	730	35A, FHN
CZRMF4736A-HF	6.8	37.0	3.5	700	1.00	5.0	4.0	133.0	660	36A, FHO
CZRMF4737A-HF	7.5	34.0	4.0	700	0.50	5.0	5.0	121.0	605	37A, FHQ
CZRMF4738A-HF	8.2	31.0	4.5	700	0.50	5.0	6.0	110.0	550	38A, FHR
CZRMF4739A-HF	9.1	28.0	5.0	700	0.50	0.5	7.0	100.0	500	39A, FHT
CZRMF4740A-HF	10.0	25.0	7.0	700	0.25	0.5	7.6	91.0	454	40A, FHU
CZRMF4741A-HF	11.0	23.0	8.0	700	0.25	0.1	8.4	83.0	414	41A, FHV
CZRMF4742A-HF	12.0	21.0	9.0	700	0.25	0.1	9.1	76.0	380	42A, FHW
CZRMF4743A-HF	13.0	19.0	10.0	700	0.25	0.1	9.9	69.0	344	43A, FHX
CZRMF4744A-HF	15.0	17.0	14.0	700	0.25	0.1	11.4	61.0	305	44A, FHZ
CZRMF4745A-HF	16.0	15.5	16.0	700	0.25	0.1	12.2	57.0	285	45A, FJA
CZRMF4746A-HF	18.0	14.0	20.0	750	0.25	0.1	13.7	50.0	250	46A, FJF
CZRMF4747A-HF	20.0	12.5	22.0	750	0.25	0.1	15.2	45.0	225	47A, FJG
CZRMF4748A-HF	22.0	11.5	23.0	750	0.25	0.1	16.7	41.0	205	48A, FJK
CZRMF4749A-HF	24.0	10.5	25.0	750	0.25	0.1	18.2	38.0	190	49A, FJL
CZRMF4750A-HF	27.0	9.5	35.0	750	0.25	0.1	20.6	34.0	170	50A, FJN
CZRMF4751A-HF	30.0	8.5	40.0	1000	0.25	0.1	22.8	30.0	150	51A, FJQ
CZRMF4752A-HF	33.0	7.5	45.0	1000	0.25	0.1	25.1	27.0	135	52A, FJR
CZRMF4753A-HF	36.0	7.0	50.0	1000	0.25	0.1	27.4	25.0	125	53A, FJS
CZRMF4754A-HF	39.0	6.5	60.0	1000	0.25	0.1	29.7	23.0	115	54A, FJT
CZRMF4755A-HF	43.0	6.0	70.0	1500	0.25	0.1	32.7	22.0	110	55A, FLG
CZRMF4756A-HF	47.0	5.5	80.0	1500	0.25	0.1	35.8	19.0	95	56A, FLJ
CZRMF4757A-HF	51.0	5.0	95.0	1500	0.25	0.1	38.8	18.0	90	57A, FLK
CZRMF4758A-HF	56.0	4.5	110.0	2000	0.25	0.1	42.6	16.0	80	58A, FLL
CZRMF4759A-HF	62.0	4.0	125.0	2000	0.25	0.1	47.1	14.0	70	59A, FLN
CZRMF4760A-HF	68.0	3.7	150.0	2000	0.25	0.1	51.7	13.0	65	60A, FLO
CZRMF4761A-HF	75.0	3.3	175.0	2000	0.25	0.1	56.0	12.0	60	61A, FLQ
CZRMF4762A-HF	82.0	3.0	200.0	3000	0.25	0.1	62.2	11.0	55	62A, FLR
CZRMF4763A-HF	91.0	2.8	250.0	3000	0.25	0.1	69.2	10.0	50	63A, FLT
CZRMF4764A-HF	100.0	2.5	350.0	3000	0.25	0.1	76.0	9.0	45	64A, FLU
CZRMF1110A-HF	110.0	2.3	450.0	4000	0.25	0.1	83.6	8.6	40	11Z, FLV
CZRMF1120A-HF	120.0	2.0	550.0	4500	0.25	0.1	91.2	7.8	37	12Z, FLW
CZRMF1130A-HF	130.0	1.9	700.0	5000	0.25	0.1	98.8	7.0	34	13Z
CZRMF1150A-HF	150.0	1.7	1000.0	6000	0.25	0.1	114.0	6.4	30	15Z, FLZ
CZRMF1160A-HF	160.0	1.6	1100.0	6500	0.25	0.1	121.6	5.8	28	16Z
CZRMF1180A-HF	180.0	1.4	1200.0	7000	0.25	0.1	136.8	5.2	25	18Z, FPF
CZRMF1200A-HF	200.0	1.2	1900.0	9990	0.25	0.1	152.0	4.7	22	20Z, FPG
CZRMF1220A-HF	220.0	1.0	1600.0	8000	0.25	0.1	167.2	4.0	20	22Z, FPK
CZRMF1240A-HF	240.0	0.9	1800.0	8500	0.25	0.1	182.4	3.8	19	24Z, FPL
CZRMF1250A-HF	250.0	0.9	2000.0	9000	0.25	0.1	190.0	3.6	18	25Z
CZRMF1270A-HF	270.0	0.8	2100.0	9000	0.25	0.1	205.0	3.3	16	27Z
CZRMF1300A-HF	300.0	0.8	2300.0	9500	0.25	0.1	228.0	3.0	15	30Z, FPQ
CZRMF1330A-HF	330.0	0.7	2500.0	9500	0.25	0.1	250.2	2.7	13	33Z, FLR

Notes: 1. The type number listed have a standard tolerance on the nominal zener voltage of $\pm 5\%$.

2. The reverse surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on I_{ZT} per JEDEC method.

Typical Rating and Characteristic Curves (CZRMF4734A-HF Thru. CZRMF1330A-HF)

Fig.1 - Power Temperature Derating Curve

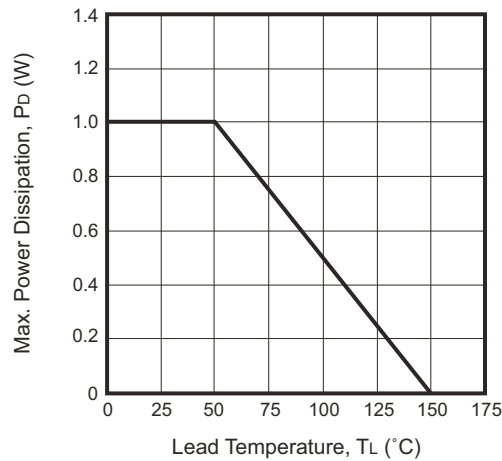


Fig.2 - Temperature Coefficients
v.s. Zener Voltage

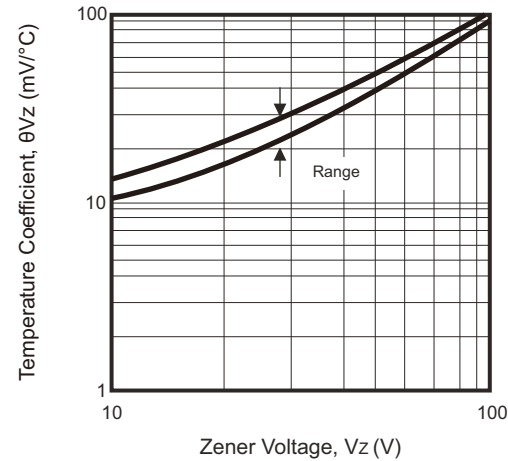
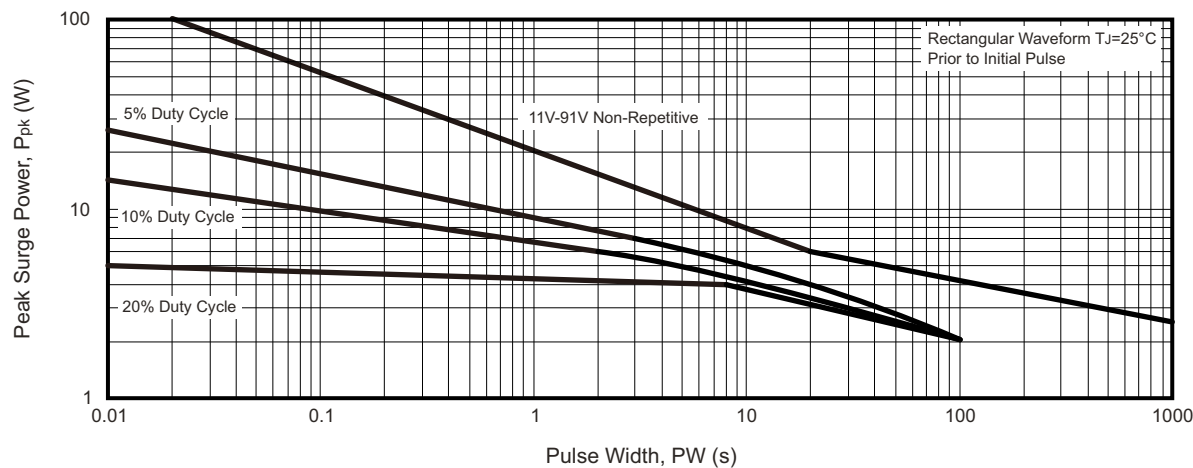
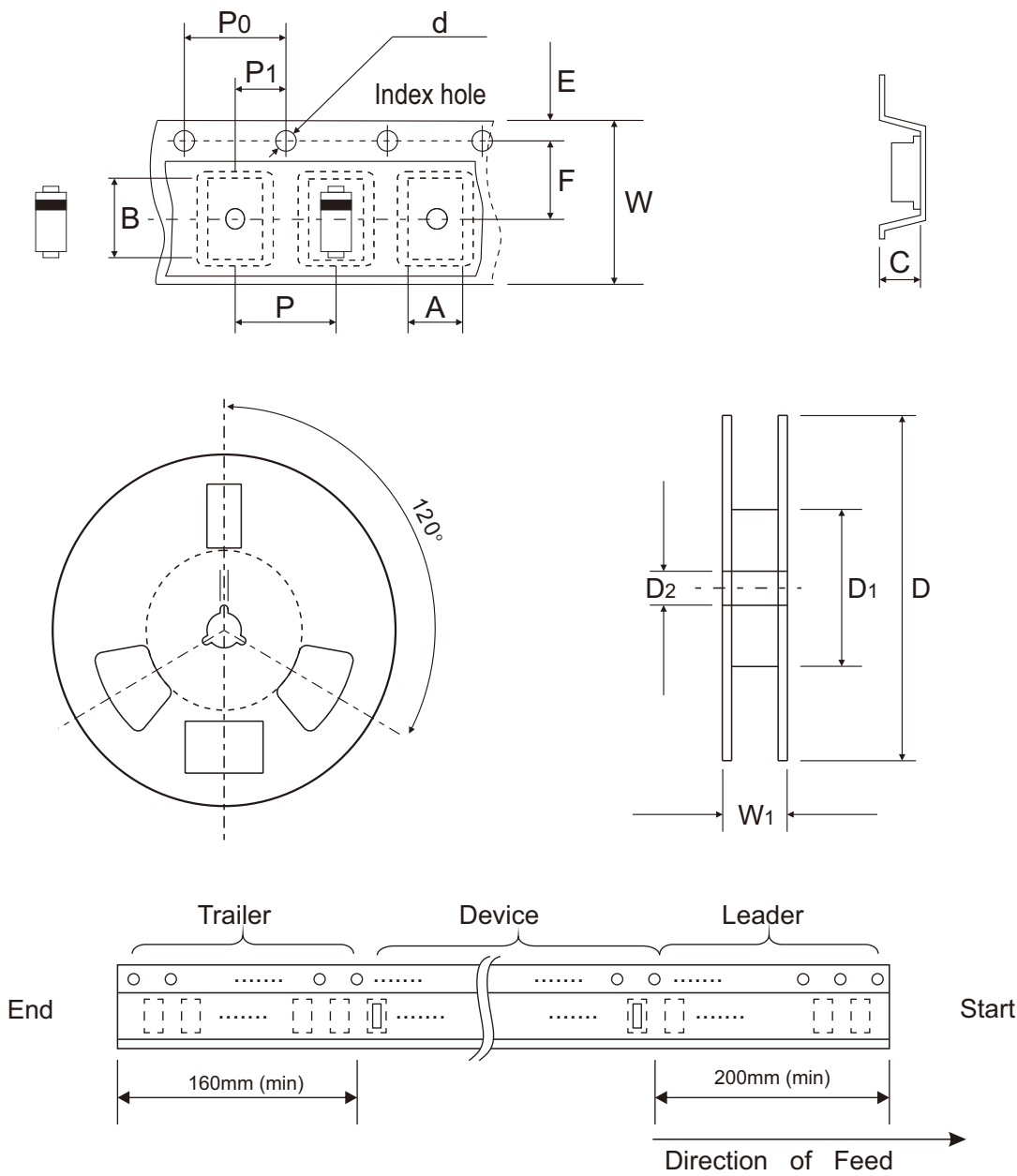


Fig.3 - Maximum Surge Power



Reel Taping Specification



SOD-123FL	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	See Note 1			1.55 ± 0.05	178.00 ± 1.00	50.00 Min.	13.00 ± 0.20
	(inch)				0.061 ± 0.002	7.008 ± 0.039	1.969 Min.	0.512 ± 0.008

SOD-123FL	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	8.00 ± 0.10	11.40 Max.
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.315 ± 0.004	0.449 Max.

Note: 1. A, B, and C the clearance between the component and the cavity must be within 0.5mm max.
for 8mm tape and 12mm tape, 1.0mm max. for 16mm tape and 24mm tape.

Marking Code

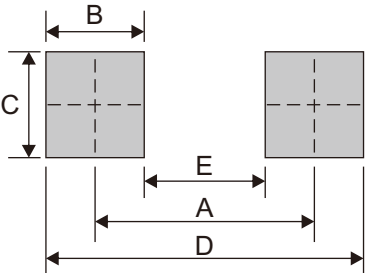
Part Number	Marking Code
CZRMF4734A-HF Thru. CZRMF1330A-HF	See Page.2



- 1. XXX = Marking code (see Page.2)
- 2.  = Cathode band

Suggested P.C.B. PAD Layout

SIZE	SOD-123FL	
	(mm)	(inch)
A	2.90	0.114
B	1.30	0.051
C	1.40	0.055
D	4.20	0.165
E	1.60	0.063



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOD-123FL	3,000	7