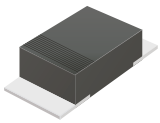
CGRMT4004-HF Thru. CGRMT4007-HF

Reverse Voltage: 50 to 1000 Volts
Forward Current: 1.0 Amp
RoHS Device
Halogen Free



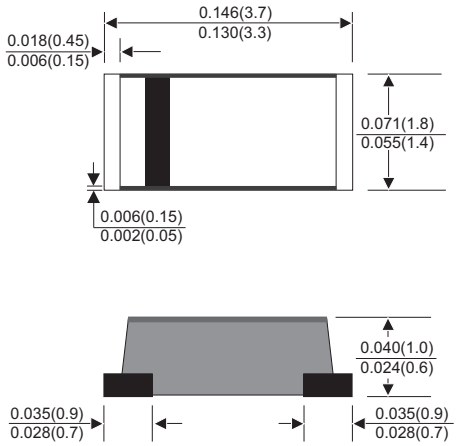
Features

-Excellent power dissipation offers better reverse leakage current and thermal resistance.
-Low profile surface mounted application in order to optimize board space.
-Tiny plastic SMD package.
-High current capability.
-High surge capability.
-Glass passivated chip junction.
-Lead-free parts meet environmental standards of MIL-STD-19500/228

Mechanical data

-Epoxy: UL94V-0 rated flame retardant.
-Case: Molded plastic, SOD-123H/MINI SMA
-Terminals: Solderable per MIL-STD-750, Method 2026.
-Polarity: Indicated by cathode band.
-Mounting Position: any
-Weight: 0.011 grams approx.

SOD-123H



Dimensions in inches and (millimeter)

Maximum Ratings and Electrical Characteristics (at T_A=25°C unless otherwise noted)

Parameter		Symbol	CGRMT 4004-HF	CGRMT 4005-HF	CGRMT 4007-HF	Unit
Max. Repetitive peak reverse voltage		V_{RRM}	400	600	1000	V
Max. Continuous reverse voltage		V_R	400	600	1000	V
Max. RMS voltage		V_{RMS}	280	420	700	V
Max. Averaged forward current		I_O	1.0			A
Max. Forward voltage @ I_F=1.0A		V_F	1.1			V
Max. Forward surge current 8.3ms singe half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	25			A
Max. Reverse current	V_R=V_{RRM} T_J=25°C	I_R	5.0			μA
	V_R=V_{RRM} T_J=125°C		50			
Typ. Thermal resistance, junction to ambient air		$R_{\theta JA}$	60			°C/W
Typ. Junction capacitance f=1MHz and applied 4V DC reverse voltage		C_J	15			pF
Operating junction temperature		T_J	-55 to +150			°C
Storage temperature range		T_{STG}	-65 to +175			°C

Company reserves the right to improve product design , functions and reliability without notice.

Rating and Characteristic Curves (CGRMT4004-HF Thru. CGRMT4007-HF)

Fig.1 - Typical Forward Current Derating Curve

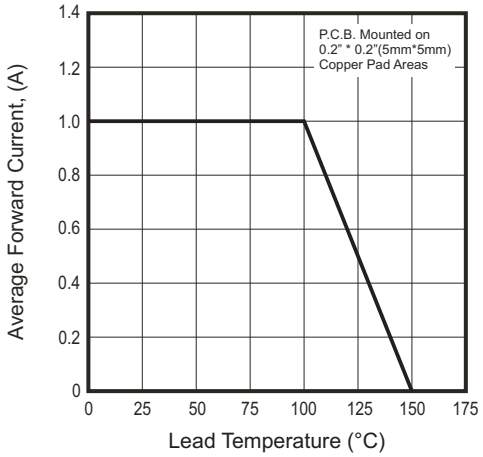


Fig.2 - Typical Forward Characteristics

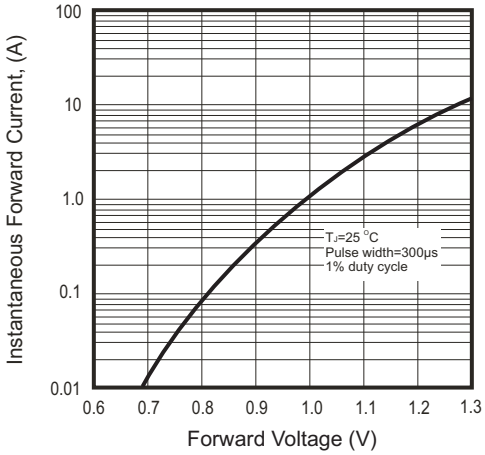


Fig.3 - Maximum Non-repetitive Forward Surge Current

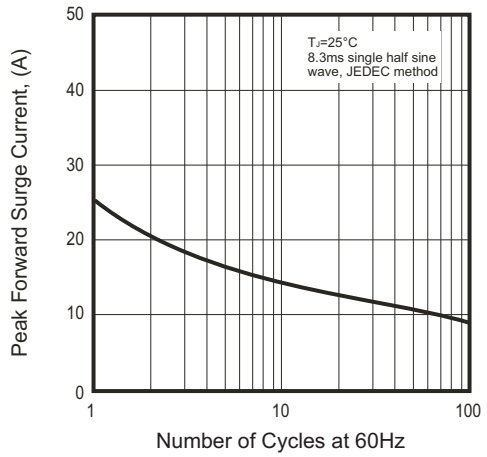


Fig.4 - Typical Junction Capacitance

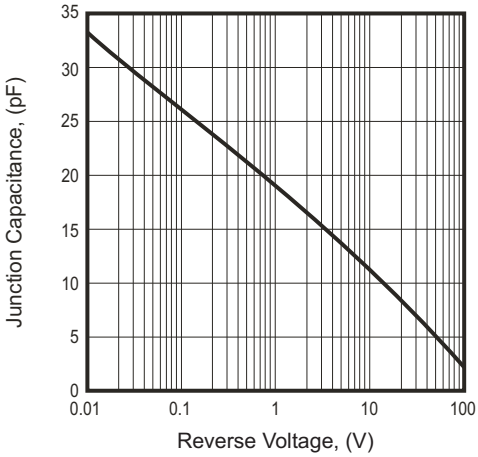
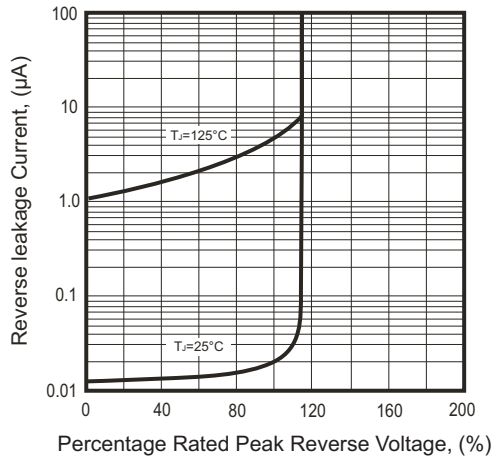


Fig.5 - Typical Revrse Characteristics



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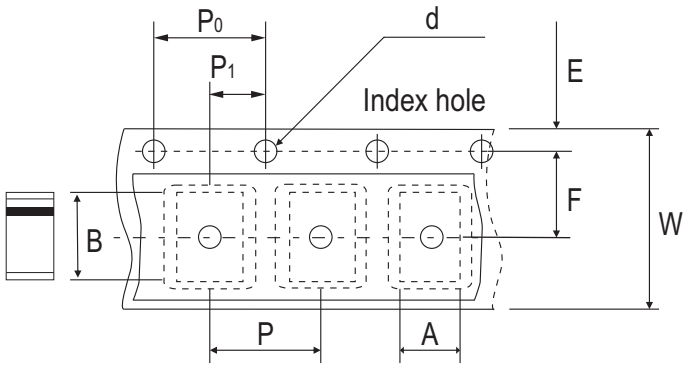
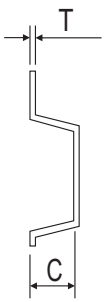
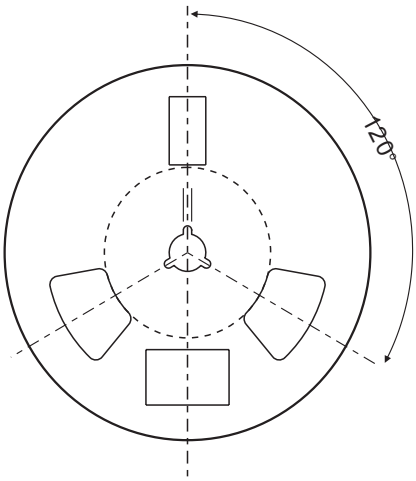
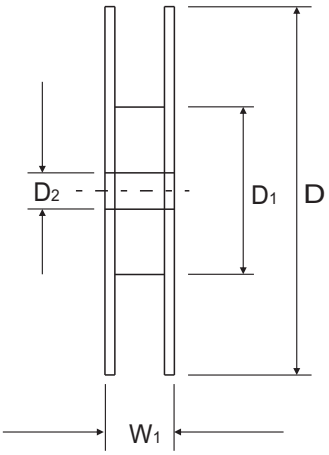
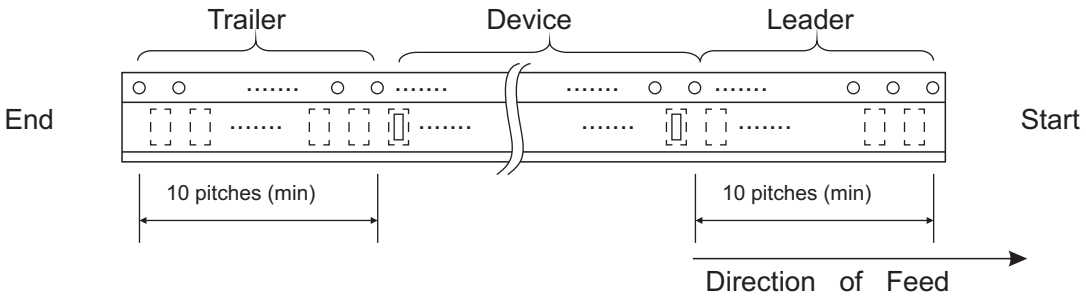
Reel Taping Specification











	SYMBOL	A	B	C	d	D	D1	D2
SOD-123H	(mm)	2.00 ± 0.10	3.85 ± 0.10	1.10 ± 0.10	1.50 ± 0.10	178.00 ± 2.00	62.00 (min)	13.00 ± 0.50
	(inch)	0.079 ± 0.004	0.152 ± 0.004	0.043 ± 0.004	0.059 ± 0.004	7.007 ± 0.079	2.441 (min)	0.512 ± 0.020

	SYMBOL	E	F	P	P0	P1	T	W	W1
SOD-123H	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	0.23 ± 0.10	8.00 ± 0.30	11.40 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.009 ± 0.04	0.315 ± 0.012	0.449 ± 0.039

Pinning information

Pin	Simplified outline	Symbol
PIN 1 Cathode PIN 2 Anode		

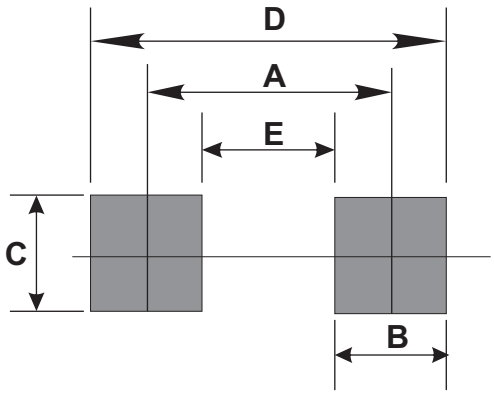
Marking Code

Part Number	Marking Code
CGRMT4004-HF	A4
CGRMT4005-HF	A5
CGRMT4007-HF	A7

xx = Product type marking code

Suggested PAD Layout

SIZE	SOD-123H	
	(mm)	(inch)
A	3.00	0.118
B	1.30	0.051
C	1.80	0.071
D	4.30	0.169
E	1.70	0.067



Standard Packaging

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