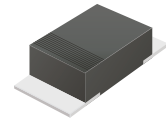


CGRM4001-G Thru. CGRM4007-G

Reverse Voltage: 50 to 1000 Volts

Forward Current: 1.0 Amp

RoHS Device

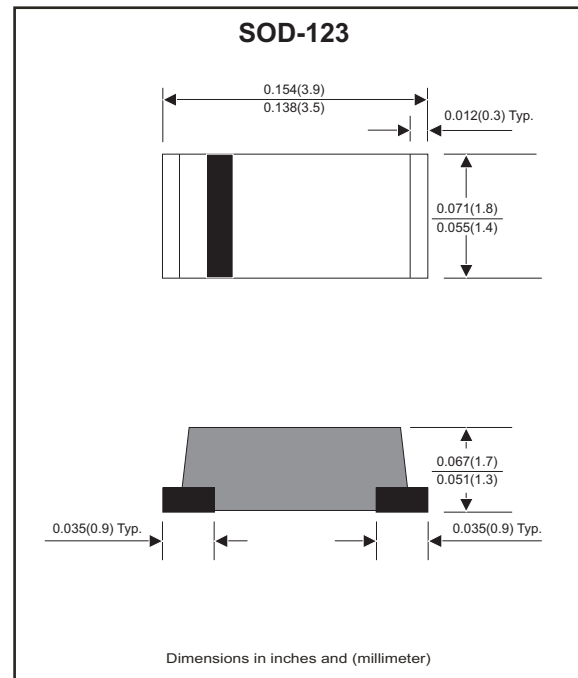


Features

- Ideal for surface mount applications.
- Easy pick and place.
- Plastic package has Underwriters Lab. flammability classification 94V-0.
- Exceeds environmental standard MIL-S-19500/228.
- Low leakage current.

Mechanical data

- Case: Molded plastic, JEDEC SOD-123/Mini SMA.
- Terminals: Solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Weight: 0.027 grams approx.



Maximum Ratings (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	CGRM 4001-G	CGRM 4002-G	CGRM 4003-G	CGRM 4004-G	CGRM 4005-G	CGRM 4006-G	CGRM 4007-G	Unit
Max. repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Max. DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Max. RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Max. averaged forward current	I_O	1.0							A
Maximum Instantaneous forward voltage at $I_F=1.0A$	V_F	1.1							V
Forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30							A
Reverse current at rated @ $T_A=25^\circ\text{C}$ DC blocking voltage @ $T_A=100^\circ\text{C}$	I_R	5 50							μA
Thermal resistance, junction to ambient air	$R_{\theta JA}$	60							$^\circ\text{C/W}$
Operating junction temperature	T_J	-55 to +150							$^\circ\text{C}$
Storage temperature range	T_{STG}	-65 to +170							$^\circ\text{C}$
Junction capacitance $f=1\text{MHz}$ and applied 4V DC reverse voltage	C_J	15							pF

Rating and Characteristic Curves (CGRM4001-G Thru. CGRM4007-G)

Fig.1 Reverse Characteristics

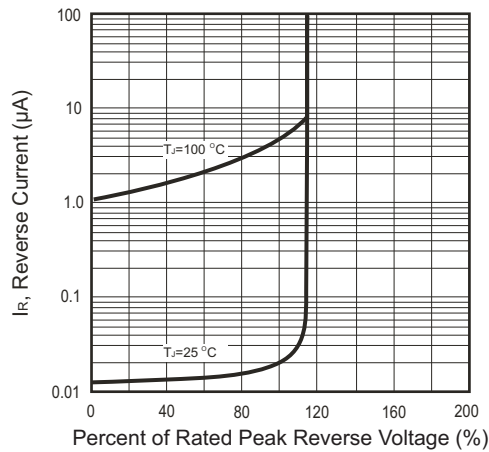


Fig.2 Forward Characteristics

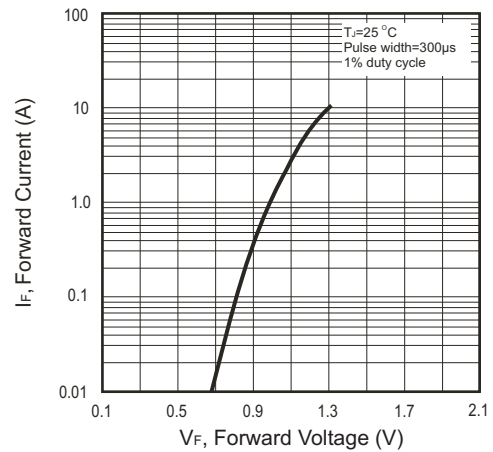


Fig.3 Junction Capacitance

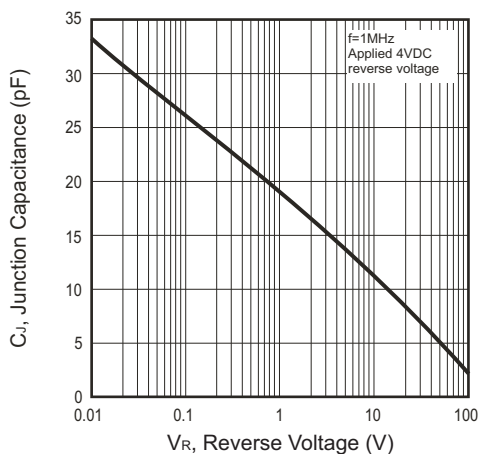


Fig.4 Current Derating Curve

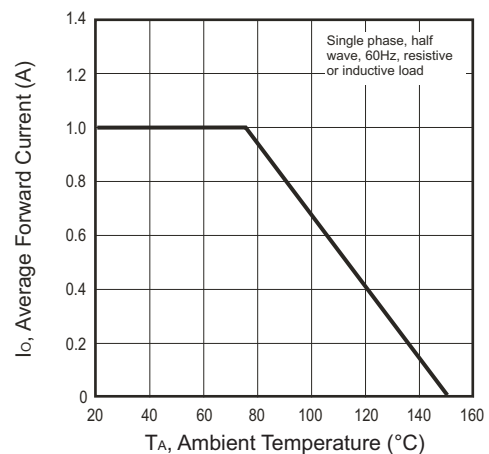
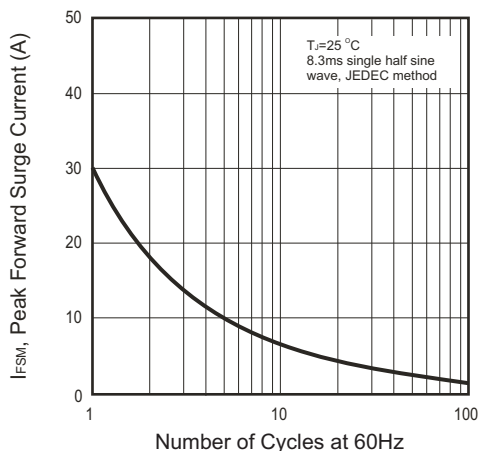
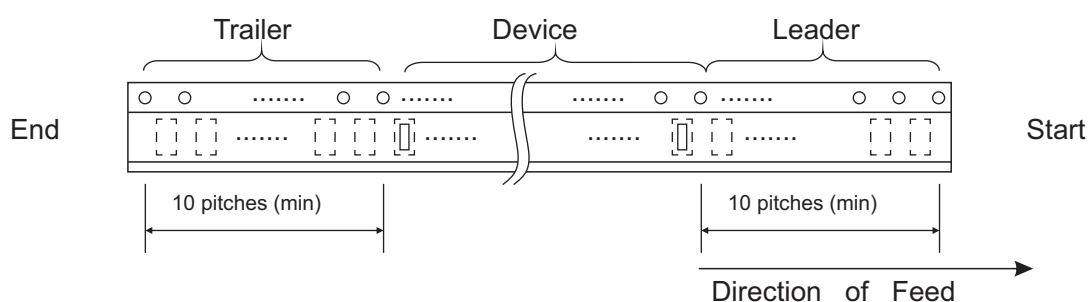
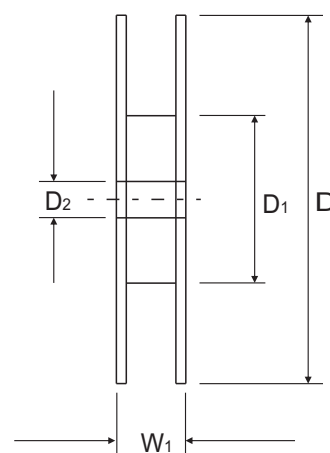
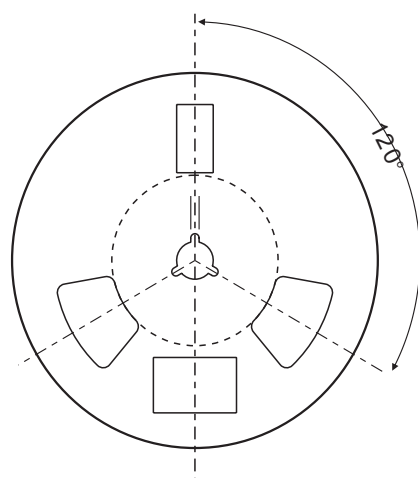
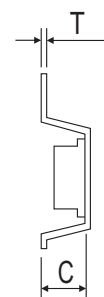
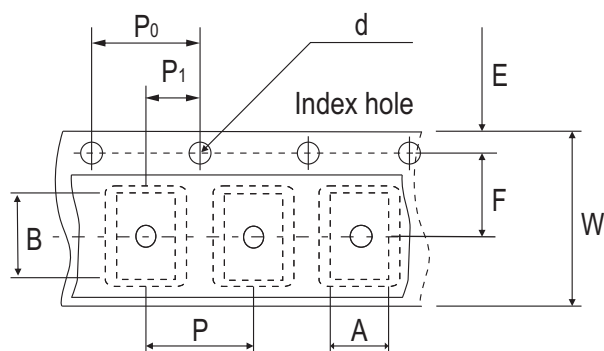


Fig.5 Non-repetitive Forward Surge Current



Reel Taping Specification



SOD-123	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.90 ± 0.10	3.90 ± 0.10	1.68 ± 0.10	1.50 ± 0.05	178 ± 1.00	62.0 MIN.	13.0 ± 0.50
	(inch)	0.075 ± 0.04	0.154 ± 0.04	0.066 ± 0.04	0.059 ± 0.002	7.008 ± 0.039	2.441 MIN.	0.512 ± 0.020

SOD-123	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	8.00 ± 0.30	11.4 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.315 ± 0.012	0.449 ± 0.039

Marking Code

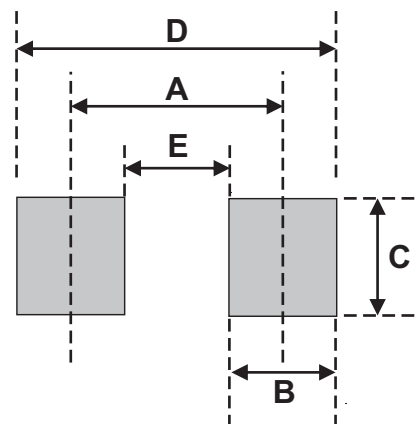
Part Number	Marking Code
CGRM4001-G	A1
CGRM4002-G	A2
CGRM4003-G	A3
CGRM4004-G	A4
CGRM4005-G	A5
CGRM4006-G	A6
CGRM4007-G	A7



xx = Product type marking code

Suggested PAD Layout

SIZE	SOD-123	
	(mm)	(inch)
A	3.80	0.150
B	1.40	0.055
C	1.90	0.075
D	5.70	0.225
E	1.90	0.075



Standard Packaging

Case Type	Qty per Reel	Reel Size
	(Pcs)	(inch)
SOD-123	2,500	7

Mouser Electronics

Authorized Distributor

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[CGRM4001-G](#)