



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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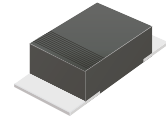


CGRM4004-HF Thru. CGRM4007-HF

Reverse Voltage: 400 to 1000 Volts

Forward Current: 1.0 Amp

RoHS Device
Halogen Free

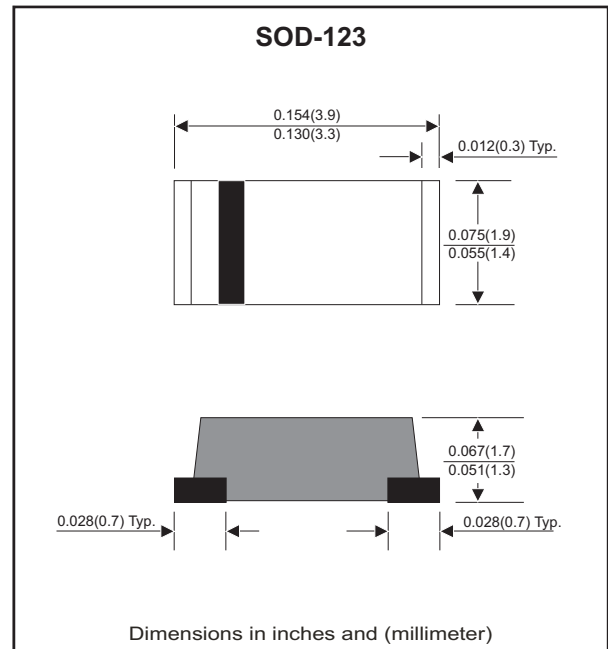


Features

- Ideal for surface mount applications.
- Easy pick and place.
- Plastic package has Underwriters Lab. flammability classification 94V-0.
- Exceeds environmental standards of MIL-STD-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: 0.018 grams approx.



Circuit diagram



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

Parameter	Symbol	CGRM 4004-HF	CGRM 4005-HF	CGRM 4007-HF	Unit
Max. repetitive peak reverse voltage	V_{RRM}	400	600	1000	V
Max. DC blocking voltage	V_{DC}	400	600	1000	V
Max. RMS voltage	V_{RMS}	280	420	700	V
Max. averaged forward current	I_o	1.0			A
Maximum Instantaneous forward voltage at $I_F=1.0A$	V_F	1.1	1.0	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 @ $T_A=125^\circ\text{C}$	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 +175		$^\circ\text{C}$
Junction capacitance $f=1\text{MHz}$ and applied 4V DC reverse voltage	C_J		15		pF

Rating and Characteristic Curves (CGRM4004-HF Thru. CGRM4007-HF)

Fig.1 - Reverse Characteristics

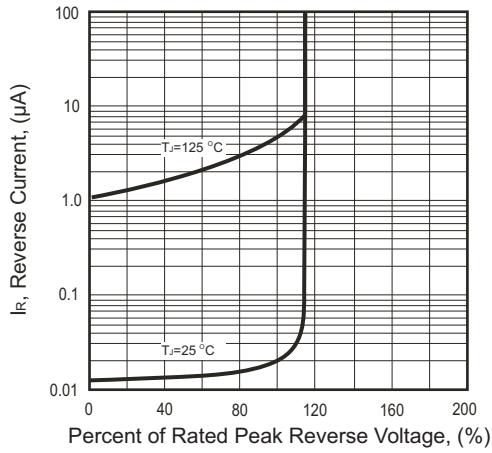


Fig.2 - Forward Characteristics

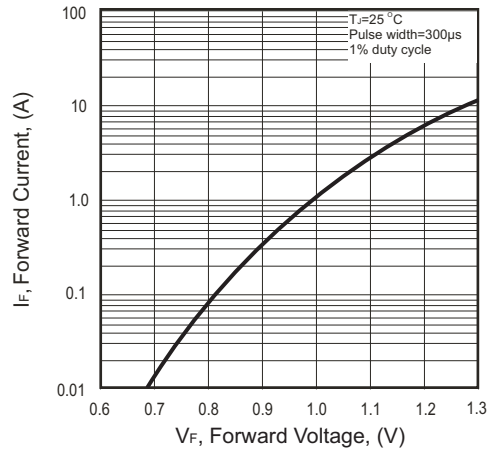


Fig.3 - Junction Capacitance

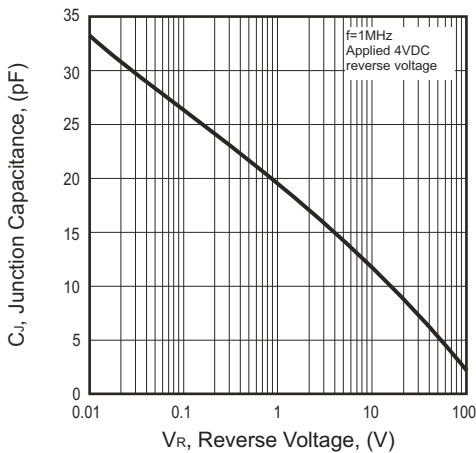


Fig.4 - Current Derating Curve

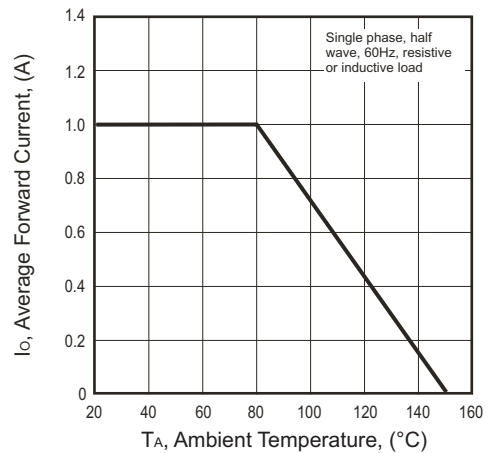
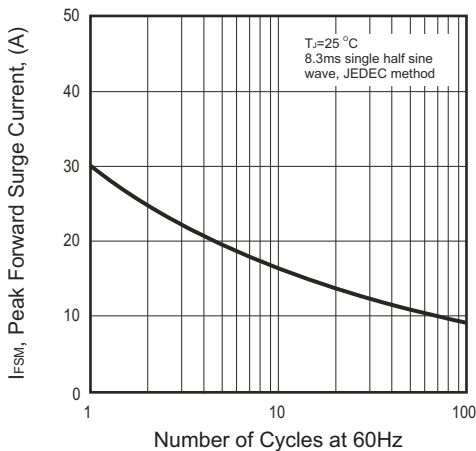
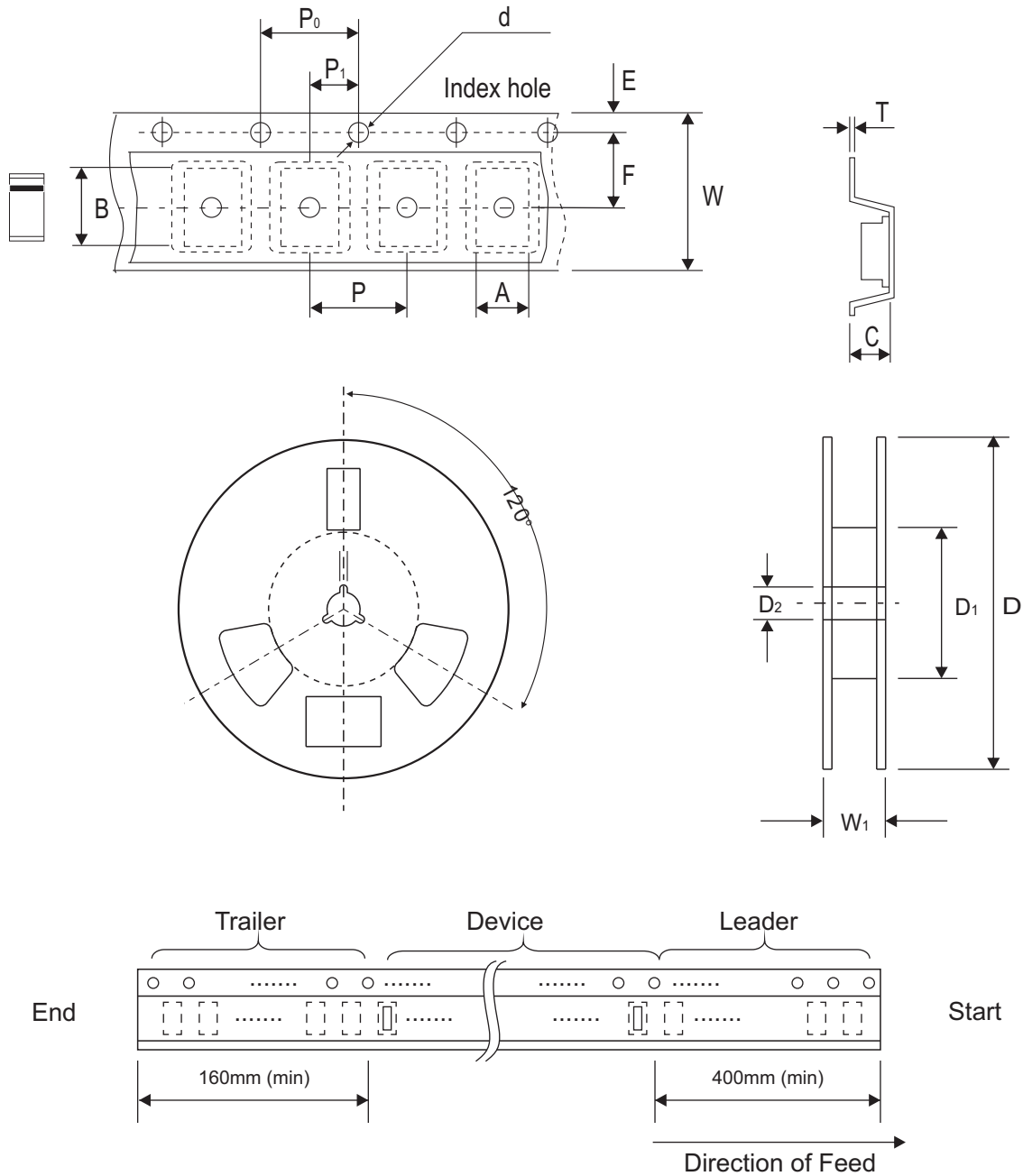


Fig.5 - Non-Repetitive Forward Surge Current



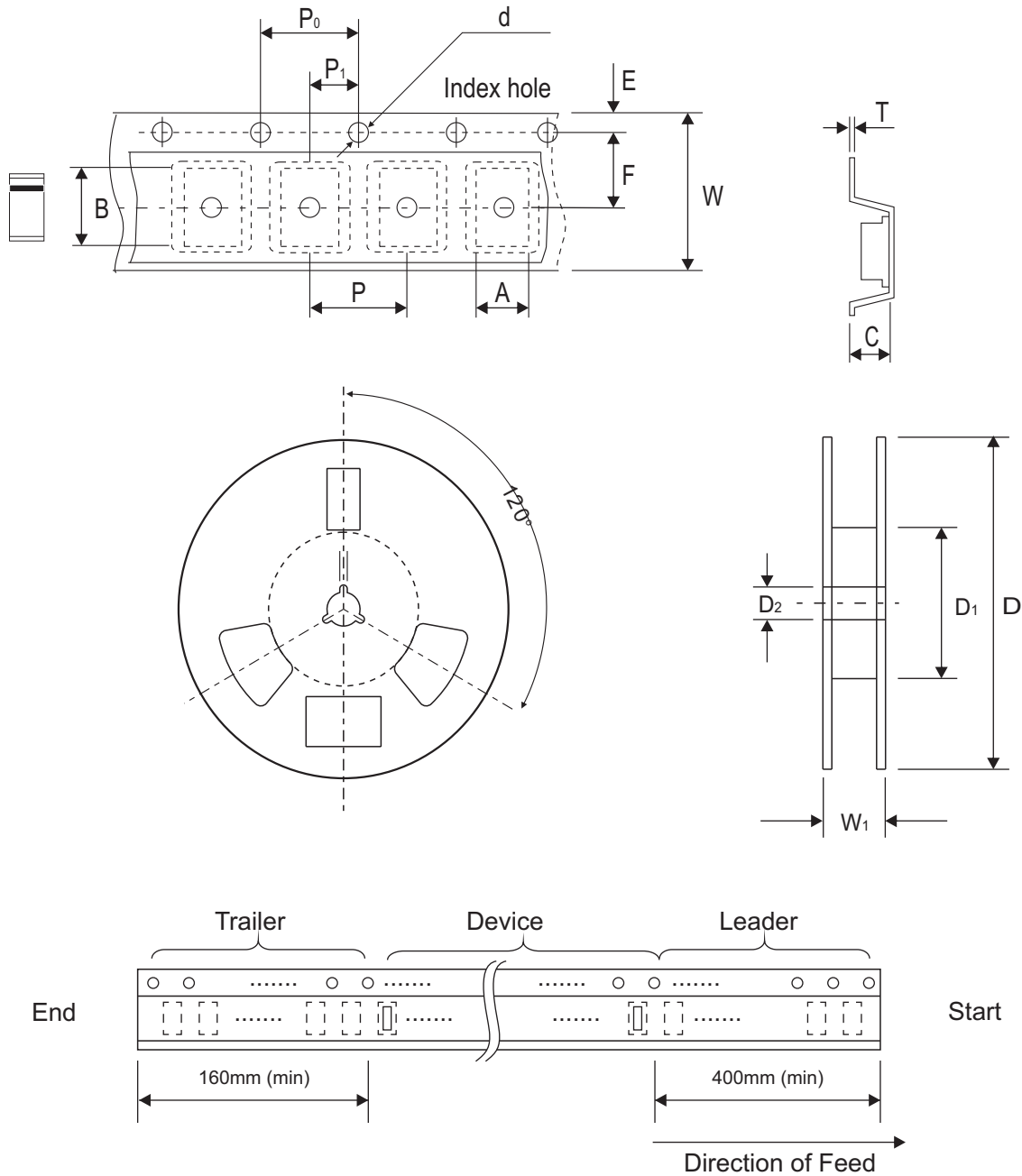
Reel Taping Specification (7" Reel)



	SYMBOL	A	B	C	d	D	D1	D2
Mini-SMA/SOD-123	(mm)	1.90 ± 0.10	3.90 ± 0.10	1.68 ± 0.10	1.50 ± 0.10	178.00 ± 2.00	62.00 MIN.	13.00 ± 0.50
	(inch)	0.075 ± 0.04	0.153 ± 0.04	0.066 ± 0.04	0.059 ± 0.004	7.00 ± 0.079	2.440 MIN.	0.512 ± 0.020

	SYMBOL	E	F	P	P0	P1	T	W	W1
Mini-SMA/SOD-123	(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 ± 0.004	0.315 ± 0.012	0.449 ± 0.040

Reel Taping Specification (13" Reel)



Mini-SMA/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 ± 0.10	330.00 ± 2.00	62.00 MIN.	13.00 ± 0.50
	(inch)	0.075 ± 0.04	0.153 ± 0.04	0.066 ± 0.04	0.059 ± 0.004	12.99 ± 0.079	2.440 MIN.	0.512 ± 0.020

Mini-SMA/SOD-123	SYMBOL	E	F	P	P0	P1	T	W	W1
	(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 ± 1.0
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.009 ± 0.004	0.315 ± 0.012	0.449 ± 0.040

Marking Code

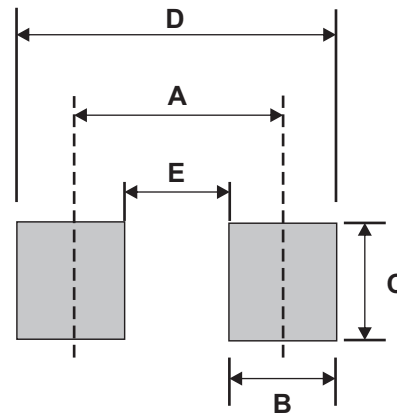
Part Number	Marking Code
CGRM4004-HF	A4
CGRM4005-HF	A5
CGRM4007-HF	A7



xx = Product type marking code

Suggested PAD Layout

SIZE	Mini-SMA/SOD-123	
	(mm)	(inch)
A	3.30	0.130
B	1.40	0.055
C	1.90	0.075
D	4.70	0.185
E	1.90	0.075



Standard Packaging

Case Type	Qty Per Reel	Reel Size
	(Pcs)	(inch)
Mini-SMA/SOD-123	2,500	7
	10,000	13