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!

Contact us

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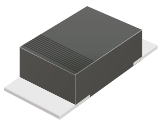
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

CSFMT104-HF Thru. CSFMT108-HF

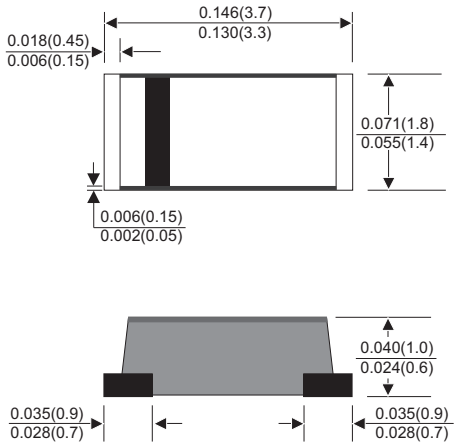
Reverse Voltage: 200 to 600 Volts
Forward Current: 1.0 Amp
RoHS Device
Halogen Free



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.
-Super fast reovery time for switching mode application.
-High surge current capability.
-Glass passivated chip junction.

SOD-123H



Dimensions in inches and (millimeter)

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.

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

Parameter		Symbol	CSFMT 104-HF	CSFMT 106-HF	CSFMT 108-HF	Unit
Max. repetitive peak reverse voltage		V_{RRM}	200	400	600	V
Max. Continuous rever voltage		V_R	200	400	600	V
Max. RMS voltage		V_{RMS}	140	280	420	V
Max. Forward rectified current		I_O	1.0			A
Max. Forward voltage @ I_F=1.0A		V_F	0.95	1.25	1.70	V
Reverse recovery time (Note 1)		T_{RR}	35			ns
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		100			
Typ. Thermal resistance Junction to ambient air		$R_{\theta JA}$	42			°C/W
Typ. Junction capacitance f=1MHz and applied 4V DC reverse voltage		C_J	10			pF
Operating junction temperature		T_J	-55 to +150			°C
Storage temperature		T_{STG}	-65 to +175			°C

Note 1. Reverse recovery time test condition, I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

Rating and Characteristic Curves (CSFMT104-HF Thru. CSFMT108-HF)

Fig.1 - Typical Forward Current Derating Curve

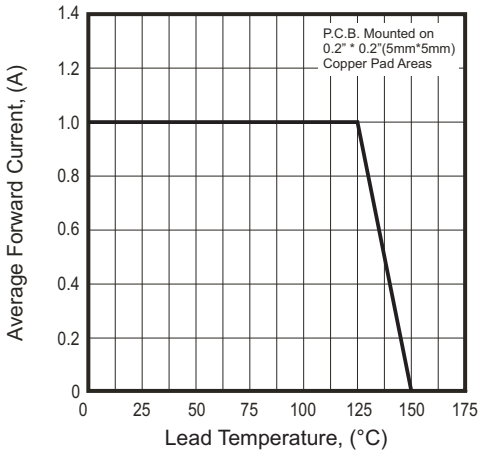


Fig.2 - Typical Forward Characteristics

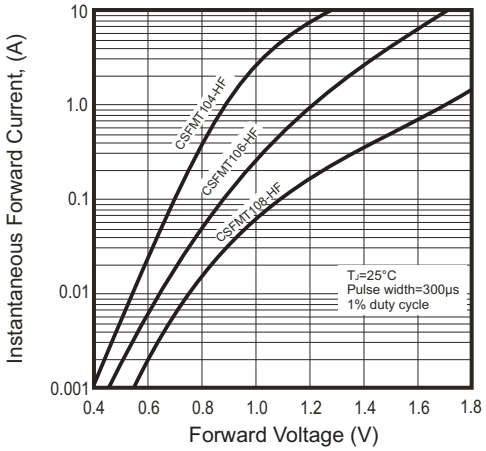
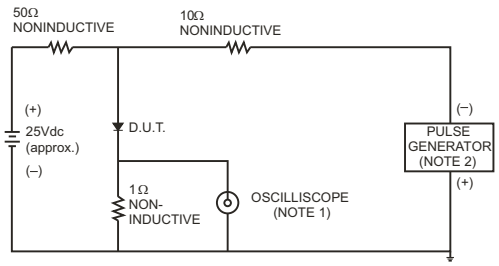
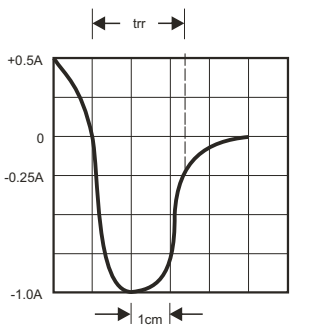


Fig.3- Test Circuit Diagram and Reverse Recovery Time Characteristics



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.



SET TIME BASE FOR

50 / 10ns / cm

Fig.4 - Maximum Non-repetitive Forward Surge Current

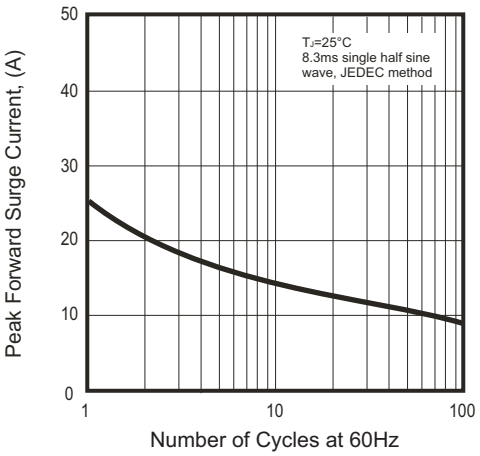
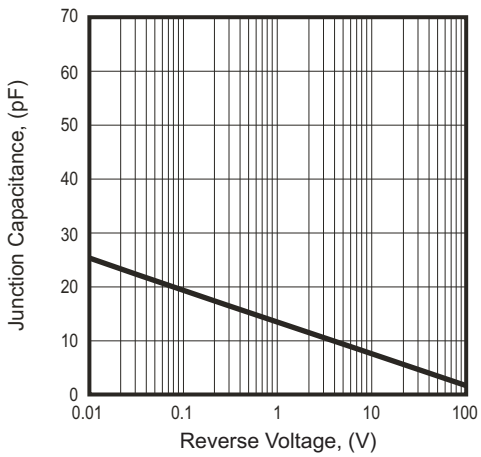
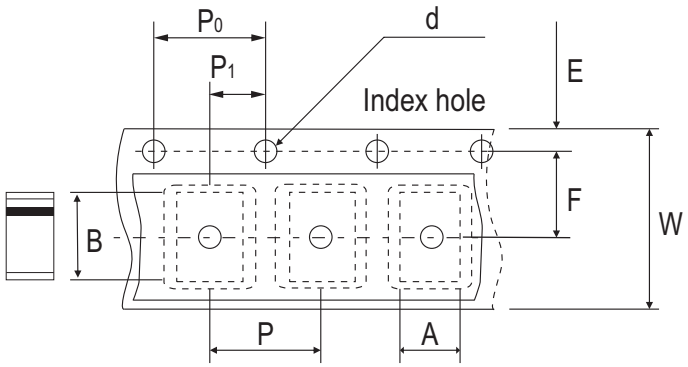
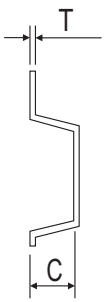


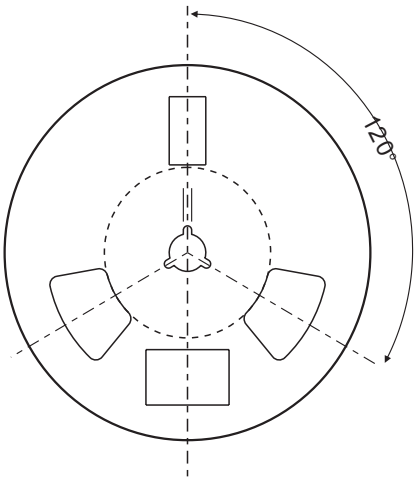
Fig.5 - Typical Junction Capacitance

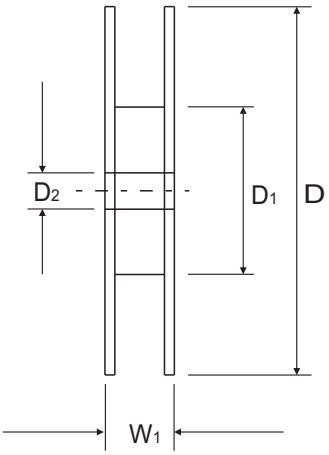


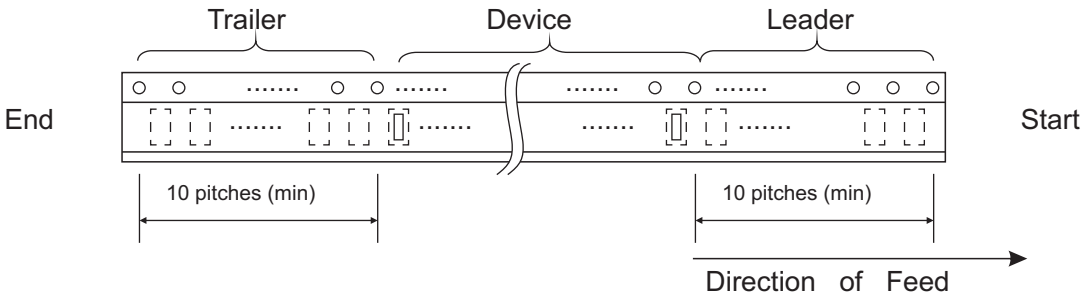
Reel Taping Specification











	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		

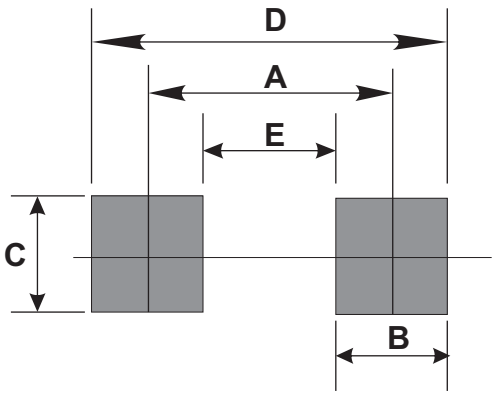
Marking Code

Part Number	Marking Code
CSFMT104-HF	S4
CSFMT106-HF	S6
CSFMT108-HF	S8

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