

CSFM101-G Thru. CSFM105-G

Reverse Voltage: 50 to 600 Volts

Forward Current: 1.0 Amp

RoHS Device

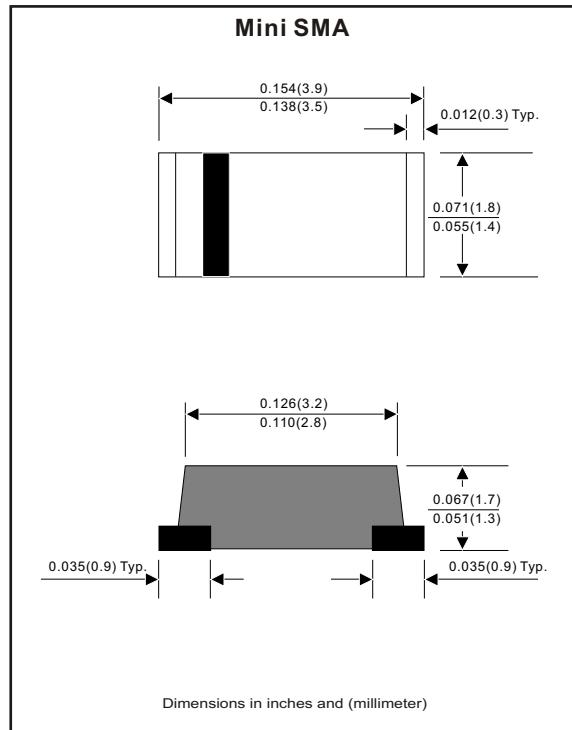


Features

- Ideal for surface mount applications.
- Easy pick and place.
- Plastic package has Underwriters Lab. flammability classification 94V-0.
- Super fast recovery time 35nS.
- Built-in strain relief.
- Low forward voltage drop.

Mechanical data

- Case: Molded plastic, JEDEC SOD-123/Mini SMA.
- Terminals: Solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Weight: 0.04 grams approx.



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

Parameter	Symbol	CSFM 101-G	CSFM 102-G	CSFM 103-G	CSFM 104-G	CSFM 105-G	Unit
Max. repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	V
Max. DC blocking voltage	V_{DC}	50	100	200	400	600	V
Max. RMS voltage	V_{RMS}	35	70	140	280	420	V
Max. averaged forward current	I_o			1.0			A
Maximum Instantaneous forward voltage at $I_F=1.0\text{A}$	V_F		0.95		1.25	1.70	V
Forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}			25			A
Reverse recovery time	T_{rr}			35			nS
Reverse current at rated @ $T_A=25^\circ\text{C}$ DC blocking voltage @ $T_A=100^\circ\text{C}$	I_R			5.0 100			μA
Max. thermal resistance (Note 1)	$R_{\theta JA}$			42			$^\circ\text{C}/\text{W}$
Operating junction temperature	T_J			150			$^\circ\text{C}$
Storage temperature range	T_{STG}			-55 to +150			$^\circ\text{C}$

Note 1: Thermal resistance from junction ambient.

REV:B

SMD Super Fast Recovery Rectifiers

COMCHIP
SMD Diodes Specialist

Rating and Characteristic Curves (CSFM101-G Thru. CSFM105-G)

Fig.1 Reverse Characteristics

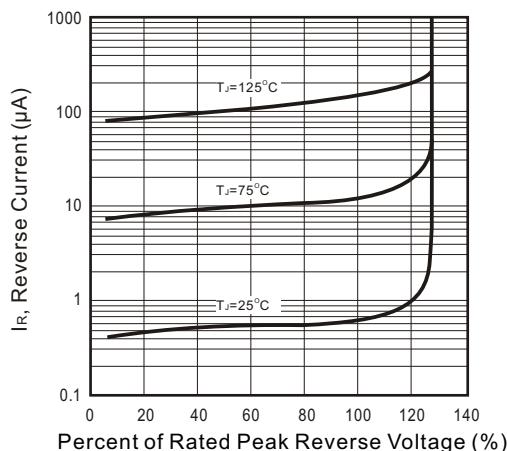


Fig.2 Forward Characteristics

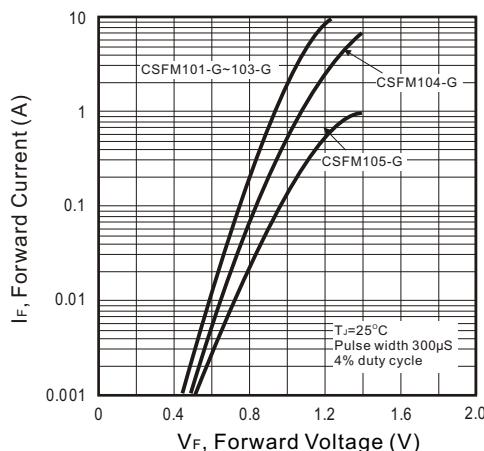


Fig.3 Junction Capacitance

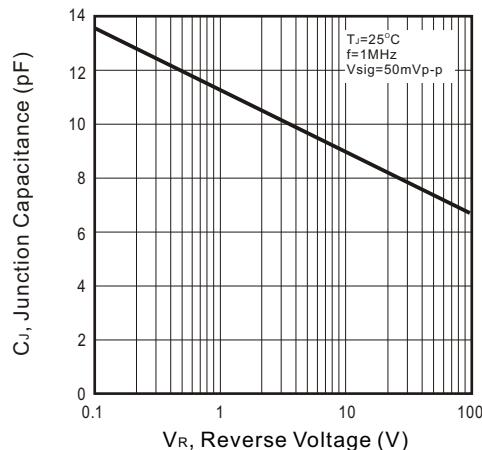


Fig.4 Current Derating Curve

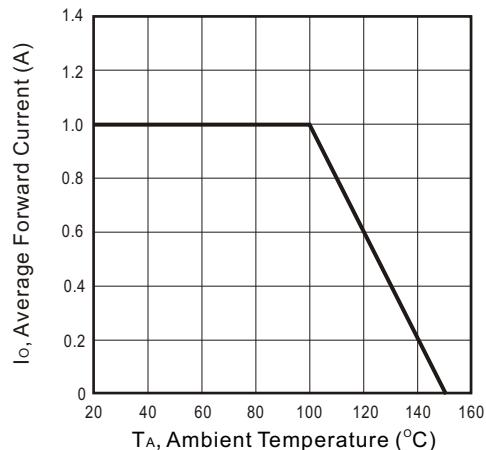


Fig.5 Non-repetitive Forward Surge Current

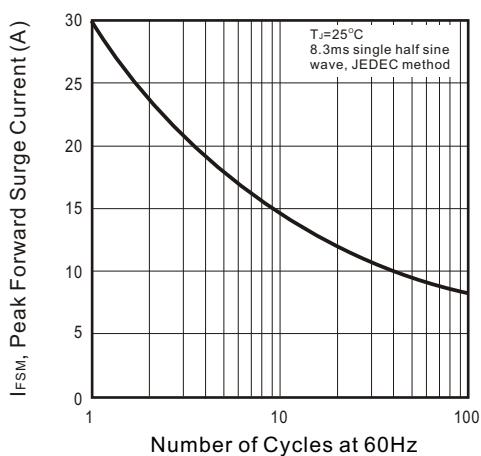


Fig.6 Test Circuit Diagram and Reverse Recovery Time Characteristics

