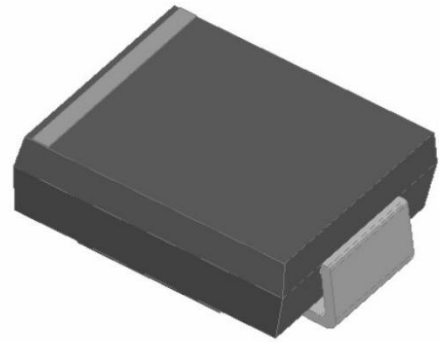


GR5A THRU GR5M Fast Recovery Rectifier

Features

- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power loss
- Glass passivated chip junction
- Solder dip 265 °C max. 10 s, per JESD 22-B106

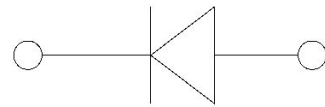


Typical Applications

For use in general purpose rectification of power supplies, inverters, converters, and freewheeling diodes for consumer, and telecommunication.

Mechanical Data

- Package: SMC
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Color band denotes cathode end



■ Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	Symbol	Unit	GR5						
			A	B	D	G	J	K	M
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	V _{RMS}	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	V _{DC}	V	50	100	200	400	600	800	1000
Average Forward Current @Half-sine wave, Resistance load, Tc(Fig.1)	I _o	A	5.0						
Forward Surge Current (Non-repetitive) @60HZ sine wave, 1 cycle, Ta=25°C	I _{FSM}	A	120						
Current squared time @1ms≤t≤8.3ms Ta=25°C, Rating of per diode	I ² t	A ² s	59.8						
Thermal Resistance(Typical) @Between junction and ambient	R _{θJ-A}	°C/W	50						
Storage Temperature	T _{stg}	°C	-55 ~ +150						
Junction Temperature	T _j	°C	-55 ~ +150						

■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	Symbol	Unit	Conditions	GR5					
				A	B	D	G	J	K
Peak Forward Voltage	V _{FM}	V	I _F = 5.0A	1.3					
Peak Reverse Current	I _{RRM}	μA	VR = V _{DC} @Ta=25°C	10					
			VR = V _{DC} @Ta=125°C	250					
Maximum reverse recovery time	T _{rr}	ns	I _F = 0.5A, I _R = 1.0A, I _{rr} = 0.25A	150			250	500	



■ Characteristics (Typical)

FIG.1: Io-TL Curve

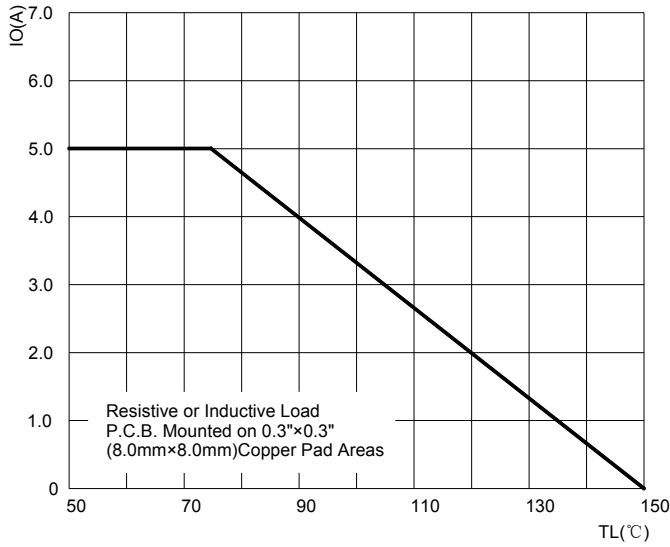


FIG.2: Forward Surge Current Capability

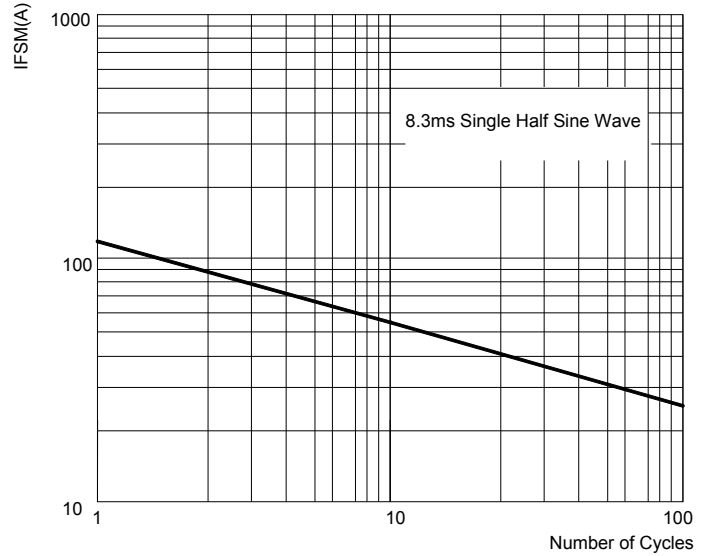


FIG.3: Forward Voltage

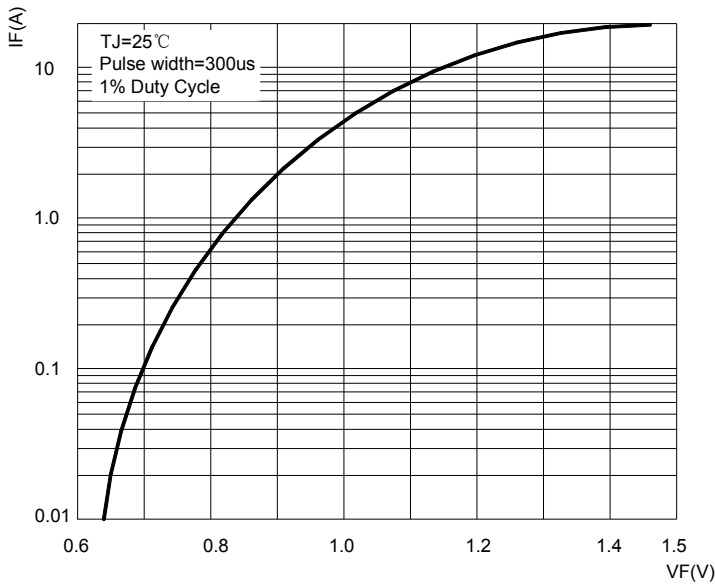


FIG.4: Typical Reverse Characteristics

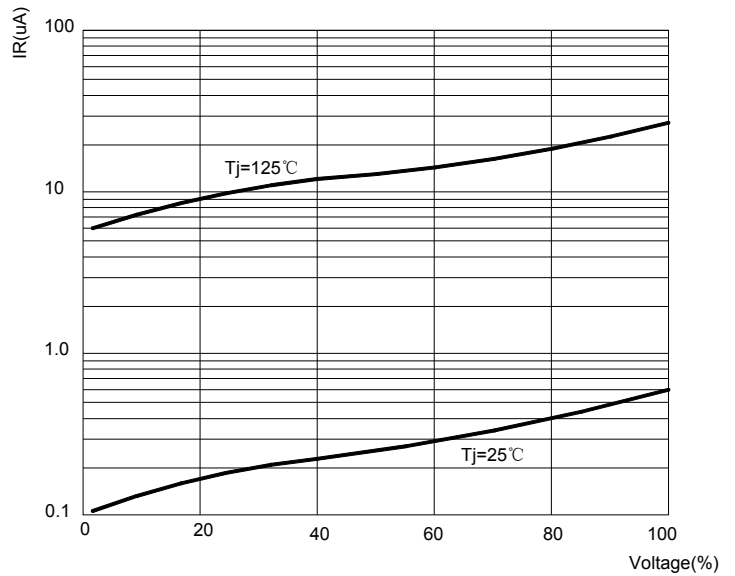
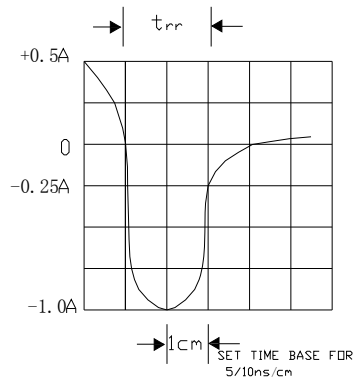
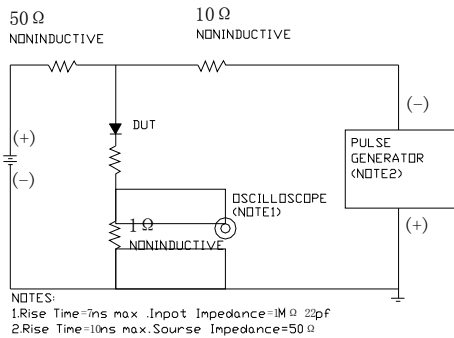


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



GR5A THRU GR5M

Ordering Information (Example)

PREFERED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GR5A THRU GR5M	SMC	3000	6000	42000	13"reel

Outline Dimensions

