

**ULTRA FAST
GLASS PASSIVATED RECTIFIERS**

REVERSE VOLTAGE - 50 to 1000 Volts
FORWARD CURRENT - 5.0 Ampere

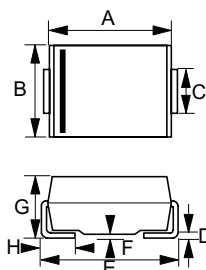
FEATURES

- Glass passivated chip
- For surface mounted applications
- Low reverse leakage current
- Fast reverse recovery time
- High current capability
- The plastic material carries UL recognition 94V-0

MECHANICAL DATA

- Case : SMC
- Polarity : Color band denotes cathode
- Weight : 0.231 grams
- Mounting position : Any

SMC



SMC		
DIM.	MIN.	MAX.
A	6.60	7.11
B	5.59	6.22
C	2.75	3.15
D	0.15	0.31
E	7.75	8.13
F	0.05	0.20
G	2.00	2.62
H	0.76	1.52

All Dimensions in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GUS 5A	GUS 5B	GUS 5D	GUS 5G	GUS 5J	GUS 5K	GUS 5M	UNIT
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	IF	5.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	IFSM	100.0							A
Maximum instantaneous IF=5A @ 25°C	VF	1.0		1.30		1.70		V	
Maximum DC Reverse Current @TA=25°C at Rated DC Blocking Voltage @TA=100°C	IR	5 100							uA
Typical Junction Capacitance(Note1)	Cj	80			50			pF	
Maximum Reverse Recovery Time(Note2)	Trr	50.0			75.0			nS	
Typical Thermal Resistance	RθJA	70							°C/W
Operating Temperature Range	Tj	-55 to +150							°C
Storage Temperature Range	TSTG	-55 to +150							°C

Note1: Measured 1.0MHZ and applied reverse voltage of 4.0 VDC

Note2: Measured with IF=0.5A, IR=1A, IRR=0.25A

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

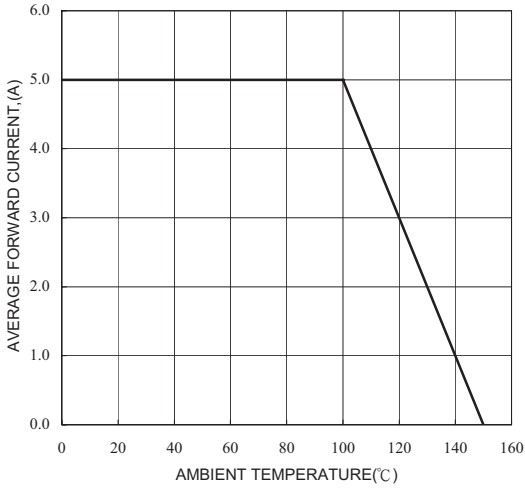


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

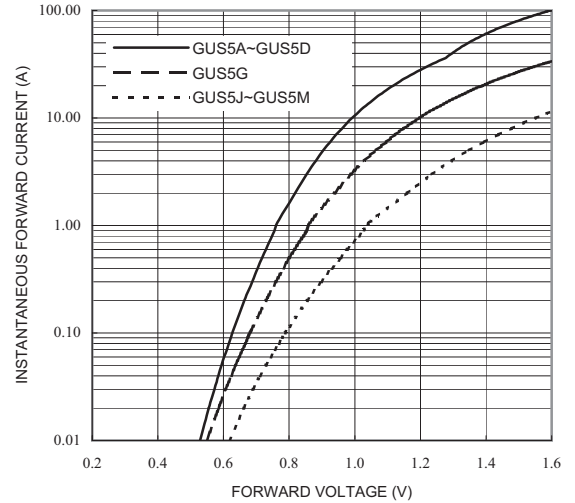


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

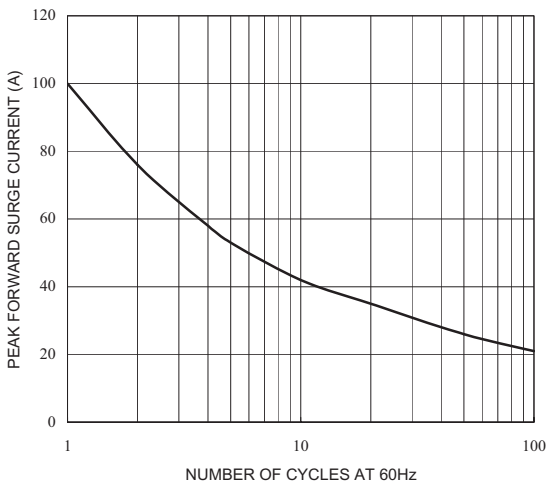


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

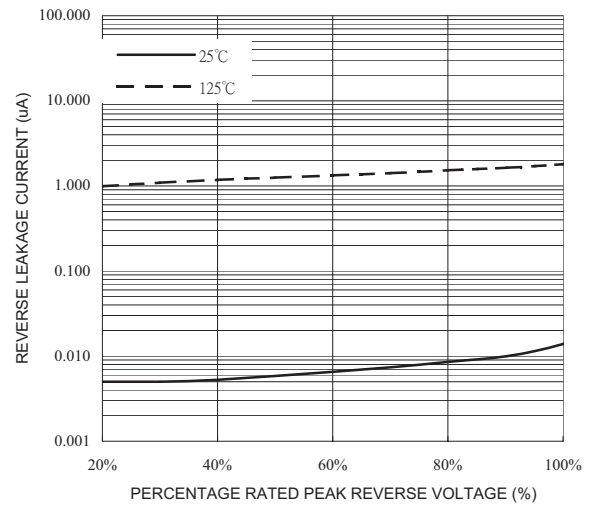


FIG. 5-TYPICAL JUNCTION CAPACITANCE

