

Fast Recovery Rectifiers

REVERSE VOLTAGE - **50 to 1000** Volts
FORWARD CURRENT - **1.0** Amperes

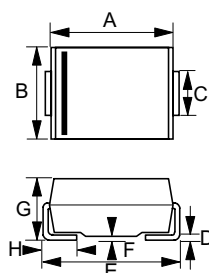
FEATURES

- Fast switching for high efficiency
- Glass passivation junction
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

MECHANICAL DATA

- Case : JEDEC SMA molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.062 grams
- Mounting position : Any

SMA



SMA		
DIM.	MIN.	MAX.
A	3.99	4.50
B	2.54	2.79
C	1.32	1.47
D	0.15	0.31
E	4.93	5.28
F	0.05	0.127
G	1.98	2.29
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	GFS 1A	GFS 1B	GFS 1D	GFS 1G	GFS 1J	GFS 1K	GFS 1M	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	1.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	IFSM	30.0							A
Maximum instantaneous IF=1A@25°C	VF	1.3							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	15							pF
Maximum Reverse Recovery Time(Note2)	Trr	150			250		500		nS
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

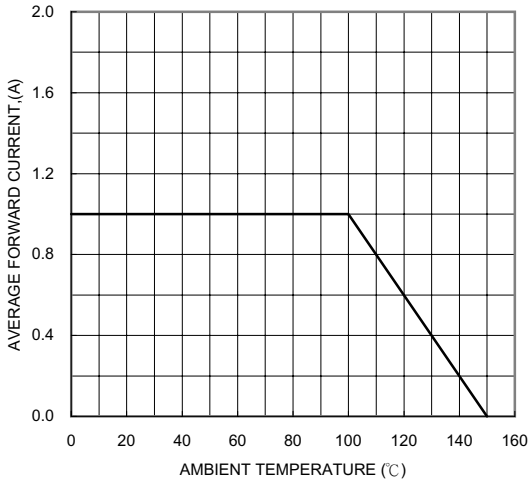


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

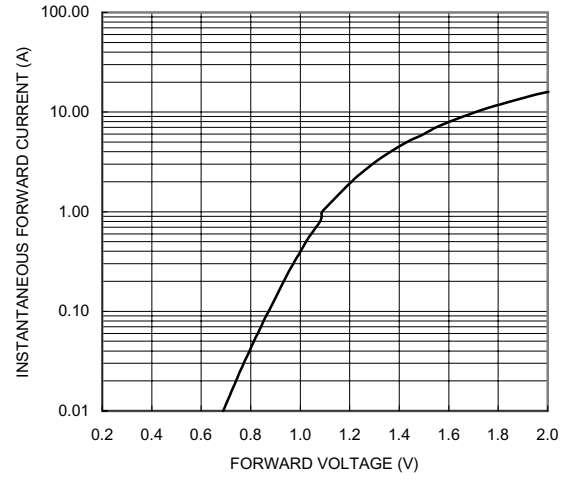


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

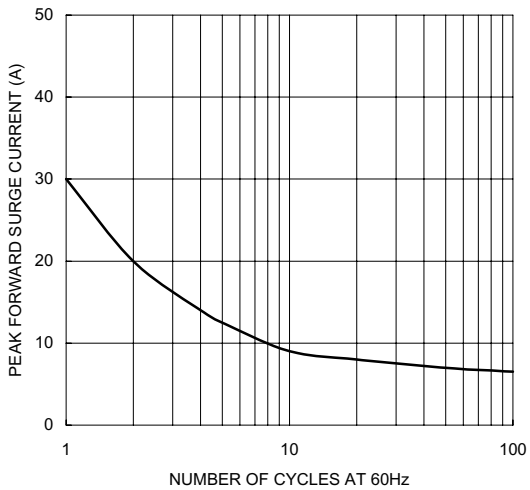


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

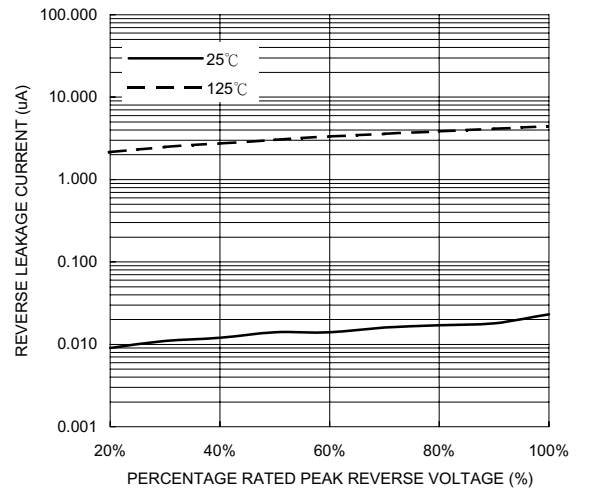


FIG. 5-TYPICAL JUNCTION CAPACITANCE

