

**SURFACE MOUNT
GLASS PASSIVATED RECTIFIER**

**REVERSE VOLTAGE – 400 to 1000 Volts
FORWARD CURRENT – 2.0 Ampere**

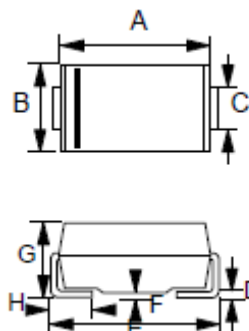
FEATURES

- Glass passivated chip
- For surface mounted applications
- Low reverse leakage current
- Low forward voltage drop
- High current capability

MECHANICAL DATA

- Case: Molded plastic
- Polarity: Indicated by cathode band
- Terminals: Solder plated copper
- Weight: 0.002 ounce, 0.064 grams

SMA



SMA		
DIM.	MIN.	MAX.
A	4.06	4.57
B	2.29	2.92
C	1.27	1.63
D	0.15	0.31
E	4.83	5.59
F	0.05	0.20
G	2.01	2.40
H	0.76	1.52

All dimension in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	S2GHA	S2JHA	S2KHA	S2MHA	UNIT
Device marking code	Note	S2GHA	S2JHA	S2KHA	S2MHA	---
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	400	600	800	1000	V
Average Rectified Output Current @ $T_L=90^\circ\text{C}$	$I_{(AV)}$	2.0				A
Peak Forward Surge Current 8.3ms single half sine-wave	I_{FSM}	50				A
Operating junction temperature range	T_J	-55 to +150				°C
Storage temperature range	T_{STG}	-55 to +150				°C
PARAMETER	TEST CONDITIONS	SYMBOL	Max.			UNIT
Forward Voltage (1)	$I_F=2.0A$ $T_j=25^\circ\text{C}$	V_F	1.15			V
Leakage Current (1)	$V_R=V_{DC}$ $T_j=25^\circ\text{C}$ $T_j=125^\circ\text{C}$	I_R	5 125			uA
THERMAL CHARACTERISTIC		SYMBOL	Typical			UNIT
Typical junction capacitance (2)		C_J	10			pF
Typical thermal resistance _ Junction to Case (3)		$R_{\theta JC}$	21			°C/W
Typical thermal resistance _ Junction to Ambient (3)		$R_{\theta JA}$	58			°C/W
Typical thermal resistance _ Junction to Lead (3)		$R_{\theta JL}$	33			°C/W

Note :

- (1) 300us Pulse width, 2% Duty cycle.
- (2) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
- (3) Thermal Resistance test performed in accordance with JESD-51. Unit mounted on 0.75t glass-epoxy substrate with 10mmx10mm copper pad. $R_{\theta JL}$ is measured at the lead of cathode band, $R_{\theta JC}$ is measured at the top centre of body.

REV. 0, Apr-2010, KSDA05

FIG.1- FORWARD CURRENT DERATING CURVE

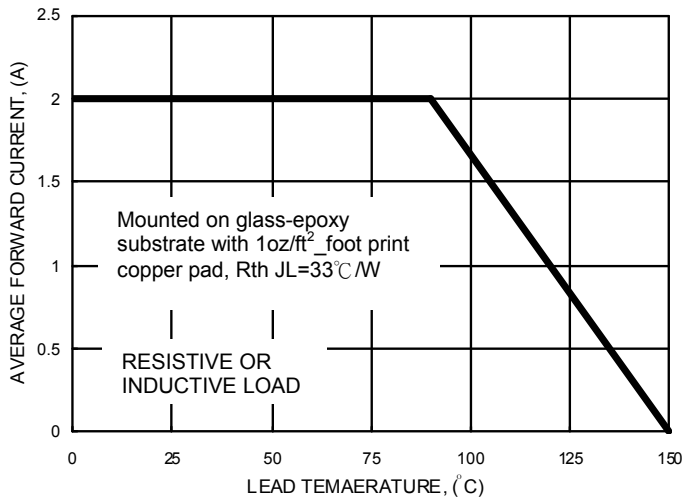


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

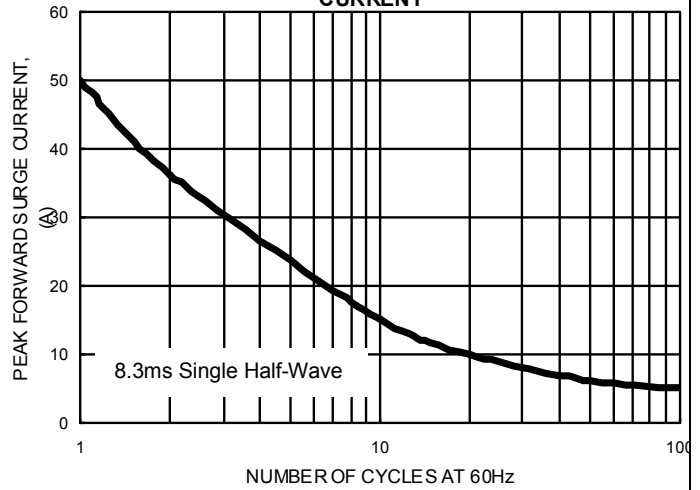


FIG.3- TYPICAL FORWARD CHARACTERISTICS

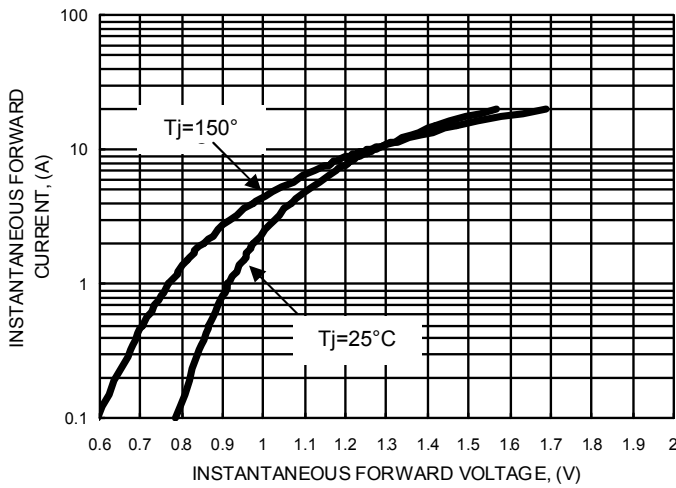


FIG.4- TYPICAL JUNCTION CAPACITANCE

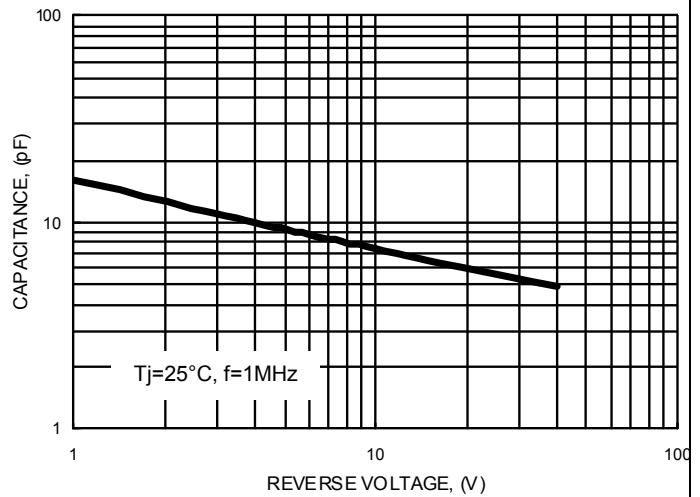
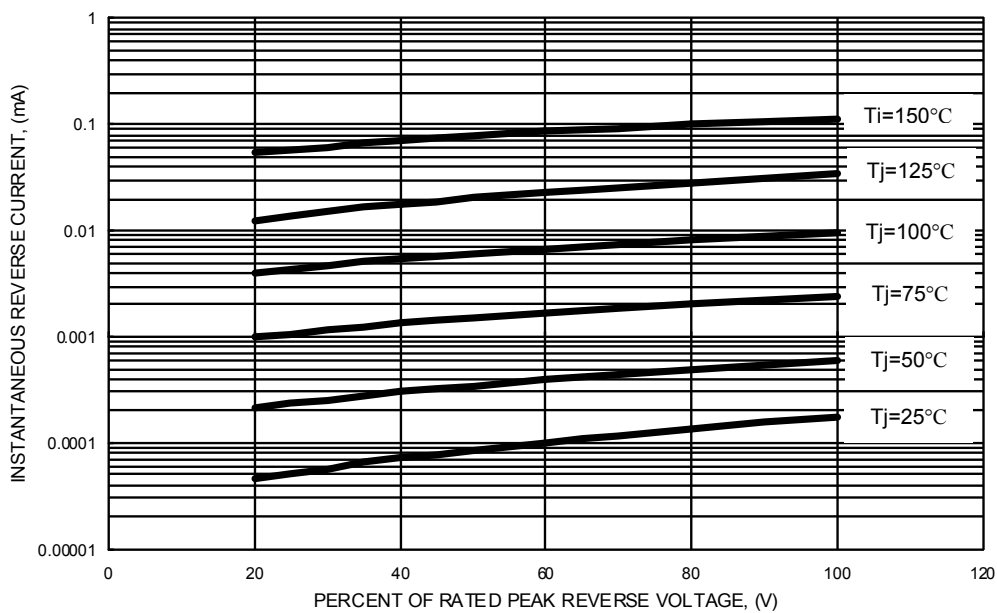


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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