Surface Mount Glass Passivated Rectifier

Features

- Glass passivated chip junction
- Built in strain relief
- High current capability
- Low forward voltage drop
- Fast switching speed for high efficiency
- High temperature Soldering guaranteed: 260℃/ 10 seconds at terminals
- RoHS and REACH compliance

DO-214AB (SMC)

RoHS COMPLIANT

Mechanical Data

Case:	JEDEC DO-214AB(SMC), transfer molded plastic
Epoxy:	Meets UL 94V-0 flammability rating
Terminals:	Solder plated, solderable per MIL-STD 750, Method 2026
Polarity:	Cathode indicated by color band
Mounting position:	Any
Weight:	0.007 ounce, 0.25 gram

Maximum Ratings *(T Ambient=25ºC unless noted otherwise)*

Symbol	Description	S3A	S3B	S3D	S3G	S3J	S3K	S3M	Unit	Conditions
VRRM	Max Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	**V**	
VRMS	Max RMS Voltage	35	70	140	280	420	560	700	**V**	
VDC	Max DC Blocking Voltage	50	100	200	400	600	800	1000	**V**	
I(AV)	Max Average Forward Rectified Current at Ambient Temperature	3.0							**A**	TL=75℃ (note 2)
IFSM	Peak Forward Surge Current	100							**A**	8.3ms single half sine-wave (JEDEC)
trr	Maximum Reverse Recovery Time	2.5							**μS**	IF=0.5A, IR=1.0A, IRR=0.25A
TJ,TSTG	Operating and Storage Temperature Range	-55 to +150							**℃**	

Electrical Characteristics *(T Ambient=25ºC unless noted otherwise)*

Symbol	Description	S3A	S3B	S3D	S3G	S3J	S3K	S3M	Unit	Conditions
VF	Max Instantaneous Forward Voltage	1.2							**V**	IF(AV)= 3.0A
IR	Max DC Reverse Current at Rated DC Blocking Voltage	5.0							**μA**	TA=25℃
		250								TA=125℃
CJ	Typical Junction Capacitance	60							**pF**	At 1MHz, reversed voltage of 4V
RθJA	Typical Thermal Resistance	47							**℃/W**	Note 2
RθJL		13								

Note:

1. Single phase, half wave, 60Hz, resistive or inductive load. Derate current by 20% for capacitive load
2. Thermal Resistance from junction to ambient and from junction to lead mounted on PCB with 0.3" x 0.3" (8.0mm x 8.0mm) copper pad areas.

Typical Characteristics Curves

FIG. 1 - FORWARD CURRENT DERATING CURVE

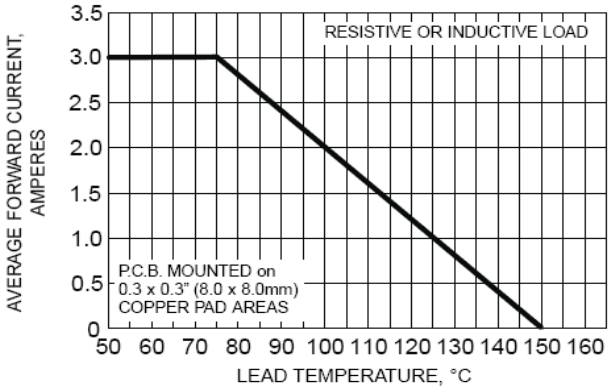


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

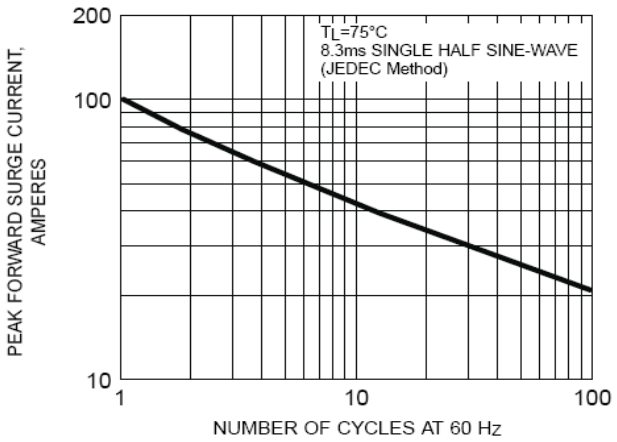


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

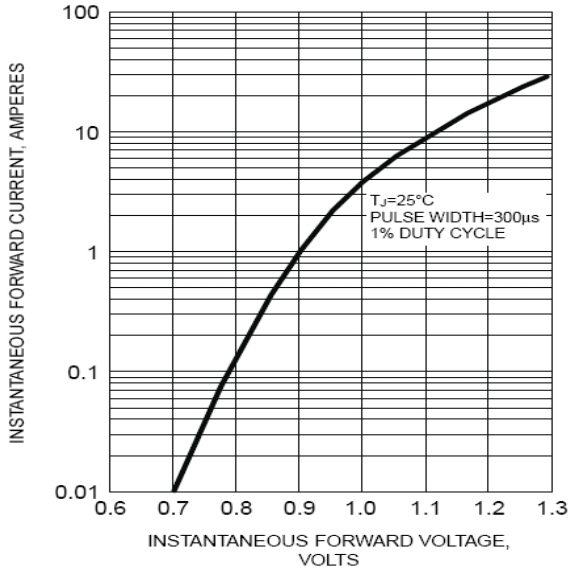


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

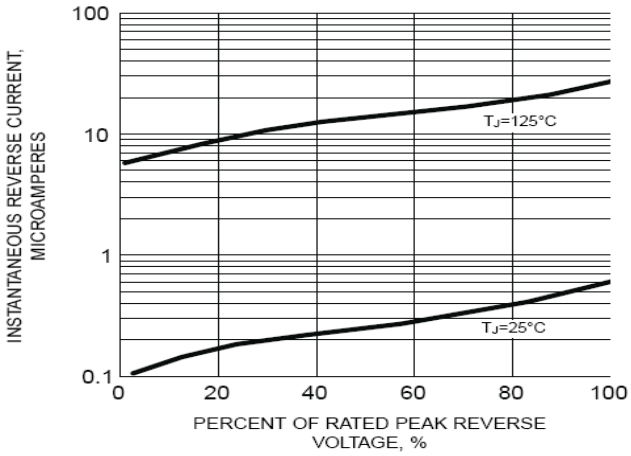


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

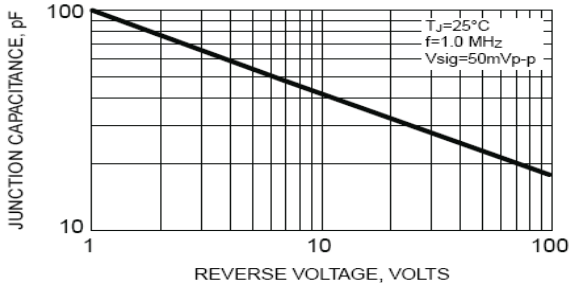
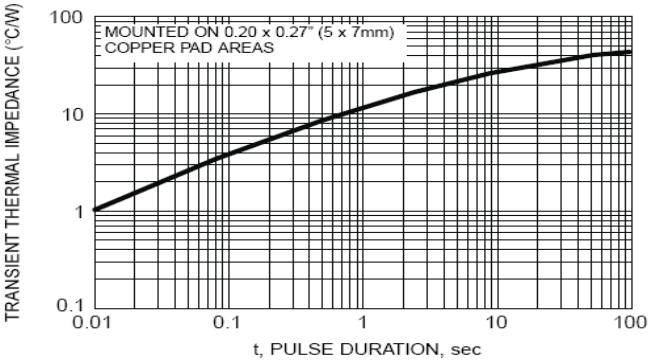
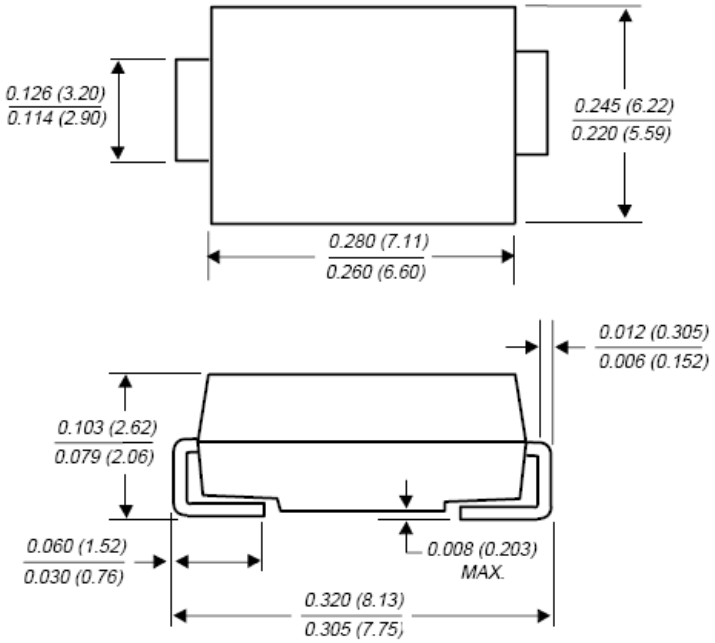


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE



Dimensions in inch (mm)



DO-214AB(SMC)

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