GN3A thru GN3M.

Surface Mount Glass Passivated Standard Rectifier

SMC(DO-214AB)

Features

- ROHS compliant
- Glass passivated chip
- High forward surge capability
- Meet MSL level 1, per J-STD-020 LF maximum peak of 250 °C
- Solder dip 260 °C / 40S
- Component in accordance to ROHS 2002/95/EC and WEEE 2002/96/WC
- UL recognition, file number E342874

Primary characteristics

$I_{F(AV)}$	3A
V_{RRM}	50V to 1000V
I_{FSM}	100A
I_{RM}	10uA
V_{FM} at I_F=3A	1.15V
T_J max.	150 °C

Applications

Ideal for ac-to-dc bridge full wave rectification suck as SMPS, home applianes, office equipment, indusrial automation applicatios

Mechanical data

- SMC(DO-214AB)
- Epoxy meets UL 94 V-0 flammability rating
- Terminals: Tin plated leads.
- Polarity: As marked.
- Mounting Torque:10cm-kg(8.8 inches-lbs)max.
- Recommended Torque:5.7 cm-kg(5 inches-lbs)

Maximum rating (Ta=25°C unless otherwise noted)

Parameter		Sym	SMC(DO-214AB)							Unit
			GN3A	GN3B	GN3D	GN3G	GN3J	GN3K	GN3M	
Max. repetitive peak reverse voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Max. RMS reverse voltage		V_{RMS}	35	70	140	280	420	560	700	V
Max. DC blocking voltage		V_{DC}	50	100	200	400	600	800	1000	V
Max. average forward current		$I_{F(AV)}$	3							A
Non-repetitive peak forward surge current 8.3ms single half-sine-wave		I_{FSM}	100							A
Max. instantaneous forward voltage drop per diode		V_{FM}	1.15 (3A)							V
Max. instantaneous reverse current at rated DC blocking voltage	Ta=25 °C	I_{RM}	10							μA
	Ta=125 °C		250							μA
Operating junction temperature		T_J	-55 ~ +150							°C
Storage temperature		T_{STG}	-55 ~ +150							°C
Typical thermal resistance (Note 1)		$R_{\Theta J-A}$	75							°C/W
		$R_{\Theta J-T}$	40							°C/W
Typical junction capacitance (Note 2)		C_J	60							pF
Typical reverse recovery time (Note 3)		t_{rr}	1							us

Notes: 1Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3 x 0.3" (8.0 x 8.0mm) copper pad areas

2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C

3. Reverse recovery test conditions: IF=0.5A, IR=1.0A, Irr=0.25A

Ordering information (Example)

PREFERRED	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
GN3M				

Typical characteristics

Fig. 1 - Forward Current Derating Curve

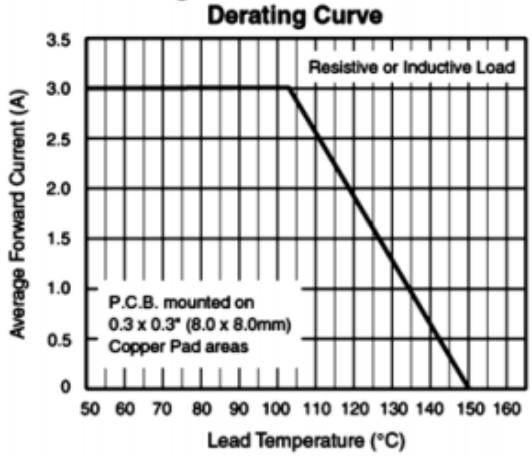


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

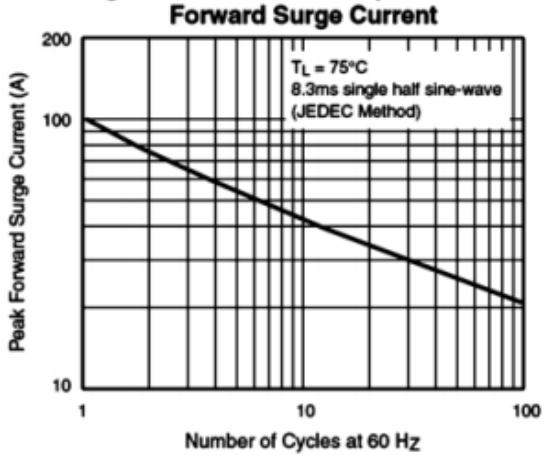


Fig. 3 - Typical Instantaneous Forward Characteristics

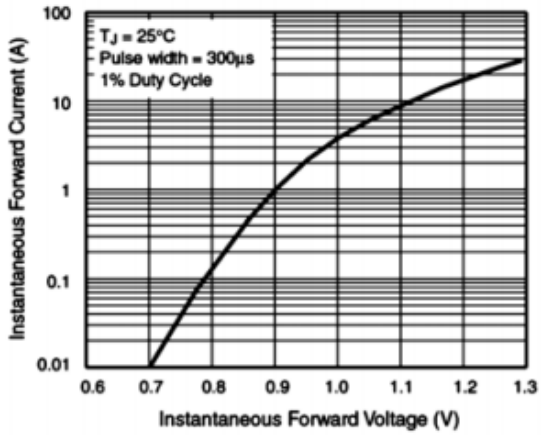
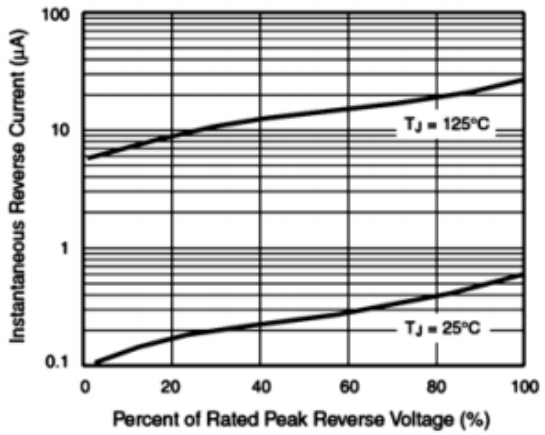
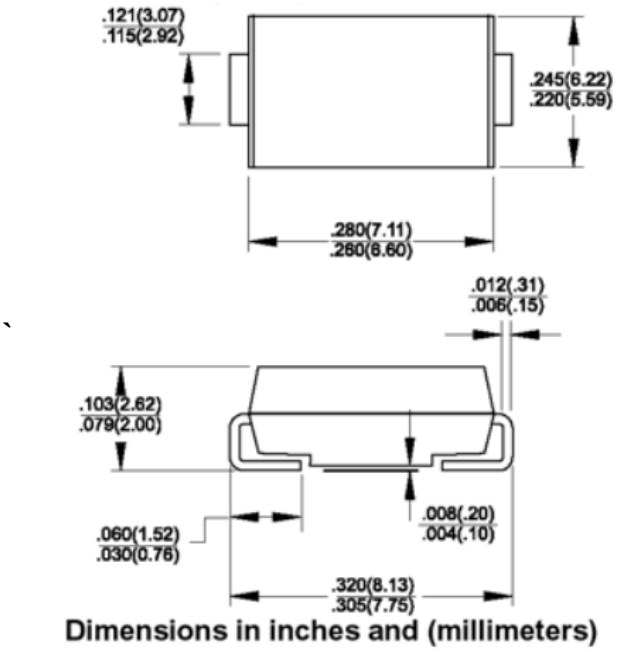


Fig. 4 - Typical Reverse Characteristics



Package outline dimensions



Dimensions in inches and (millimeters)

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