

Surface Mount Glass Passivated Standard Rectifier
DO-213AA

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

$I_{F(AV)}$	1A
V_{RRM}	50V to 1000V
I_{FSM}	25A
I_{RM}	5uA
V_{FM} at $I_F=1A$	1.1V
T_J max.	150 °C

Applications

Ideal for ac-to-dc bridge full wave rectification such as SMPS, home appliances, office equipment, industrial automation applications

Mechanical data

- DO-213AA
- 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 ($T_a=25^{\circ}C$ unless otherwise noted)

Parameter		Sym	DO - 213AA							Unit
			GL1A	GL1B	GL1D	GL1G	GL1J	GL1K	GL1M	
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)}	1							A
Non-repetitive peak forward surge current 8.3ms single half-sine-wave		I _{FSM}	25							A
Max. instantaneous forward voltage drop per diode		V _{FM}	1.1 (1A)							V
Max. instantaneous reverse current at rated DC blocking voltage	Ta=25 °C	I _{RM}	5							μA
	Ta=125 °C		50							μA
Operating junction temperature		T _J	-55 ~ +150							°C
Storage temperature		T _{STG}	-55 ~ +150							°C
Typical thermal resistance (NOTE 1,2)		R _{J-A}	75							°C/W
		R _{J-T}	40							°C/W
Typical junction capacitance (Note 2)		C _J	10							pF
Typical reverse recovery time (Note 3)		t _{rr}	1.5							us

Notes: 1 Thermal resistance from junction to ambient, 0.24×0.24(6.0×6.0mm) copper pads to each terminal

2 Thermal resistance from junction to terminal, 0.24×0.24(6.0×6.0mm) copper pads to each terminal

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

4 Reverse recovery test conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{rr}=0.25A$

Ordering information (Example)

PREFERRED	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
GL1M				

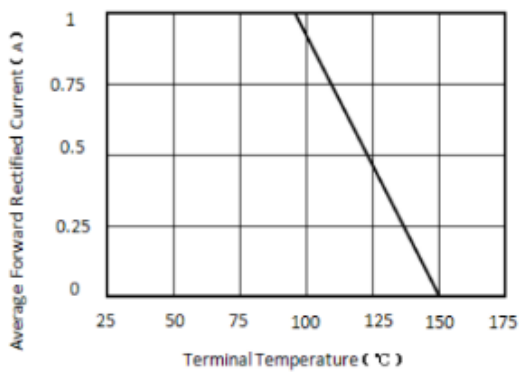
Typical characteristics


Figure 1. Forward Current Derating Curve

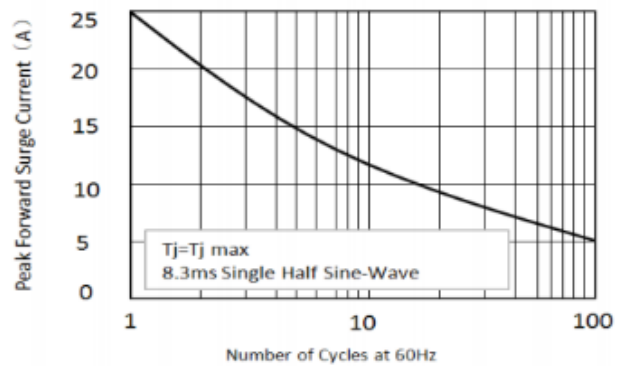


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

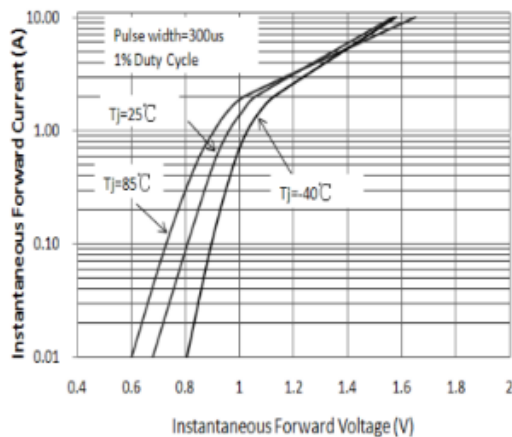


Figure 3. Typical Instantaneous Forward Characteristics

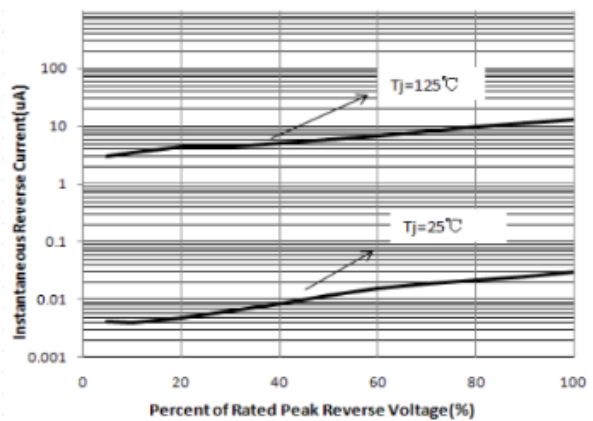
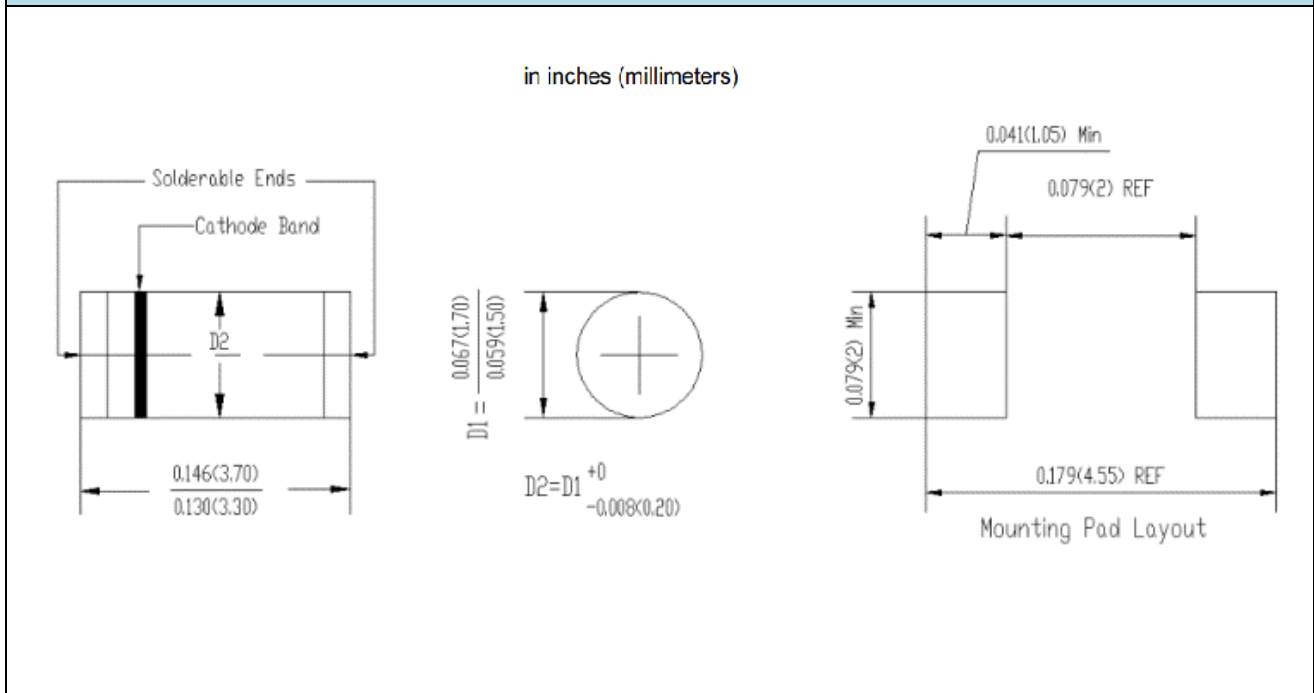


Figure 4. Typical Reverse Characteristics

Package outline dimensions



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