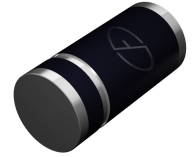


Features

- Ideal for automated placement
- Low forward voltage drop
- Low leakage current
- Meets environmental standard MIL-S-19500D
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 275 °C, 10s



Package: DO-213AA

Applications

For use in general purpose rectification of lighting, power supplies, inverters, converters and freewheeling diodes for consumer, automotive and telecommunication.



Mechanical Data

- Case: DO-213AA, molded epoxy body, epoxy meets UL 94V-0 flammability rating
- Terminals: Matte tin plated leads, solderable per J-STD-002 and JESD22B-106
- Polarity: One silver ring denotes cathode and the type numbers are noted on the label on the reel

Maximum Ratings (T_A = 25°C unless otherwise noted)

Parameter	Symbol	SGL2A	SGL2B	SGL2D	SGL2G	SGL2J	SGL2K	SGL2M	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current at T = 75 °C	I _{F(AV)}	2							A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	I _{FSM}	45							A
Operating Junction and Storage Temperature Range	T _J , T _{STG}	- 55 to + 150							°C

Electrical Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Test Conditions	Symbol	SGL2A	SGL2B	SGL2D	SGL2G	SGL2J	SGL2K	SGL2M	Unit
Maximum Instantaneous Forward Voltage	2 A	V _F	0.55			0.85				V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25 °C	I _R	0.5							mA
	T _A =125 °C		20							
Typical Junction Capacitance	4.0 V, 1 MHz	C _J	75							pF

Thermal Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Maximum Thermal Resistance	R _{θJA} (1)	85	°C/W
	R _{θJT} (2)	30	

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

Ratings and Characteristics Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

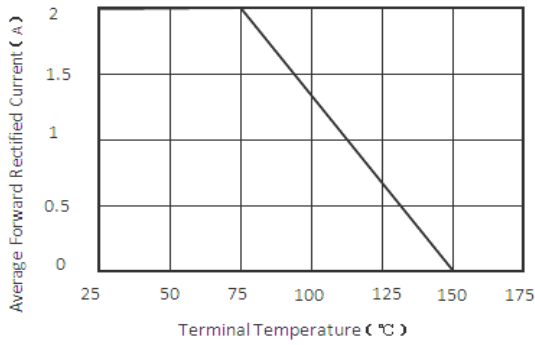


Figure 1. Forward Current Derating Curve

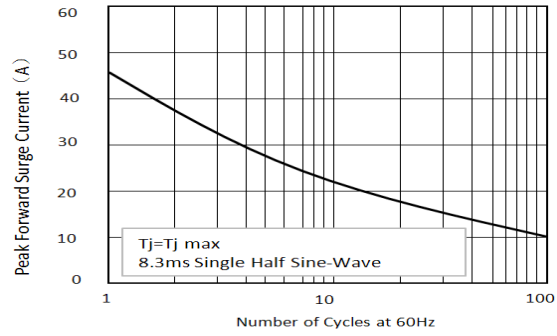


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

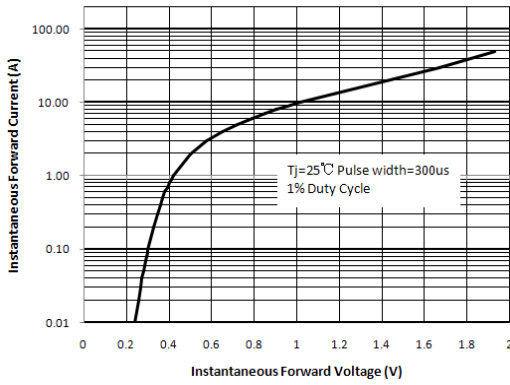


Figure 3. Typical Instantaneous Forward Characteristics

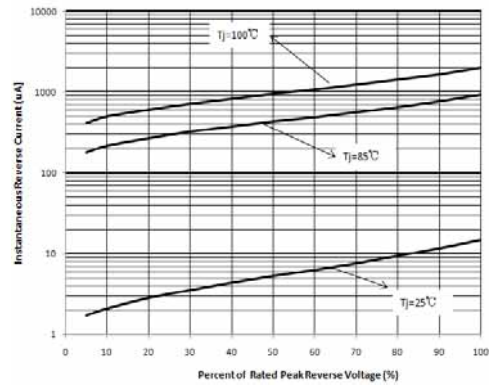


Figure 4. Maximum Non-Repetitive Peak Forward Surge Current

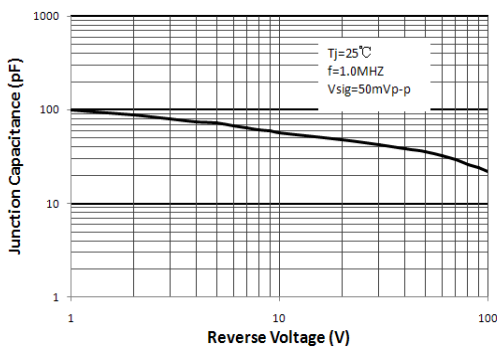


Figure 5. Typical Junction Capacitance

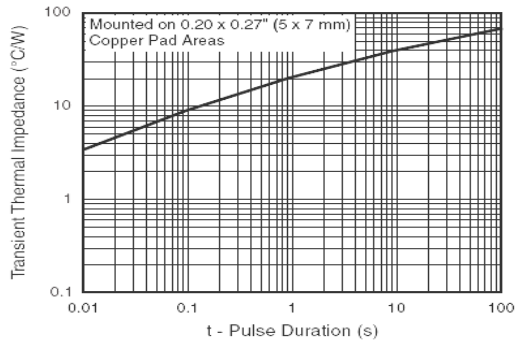
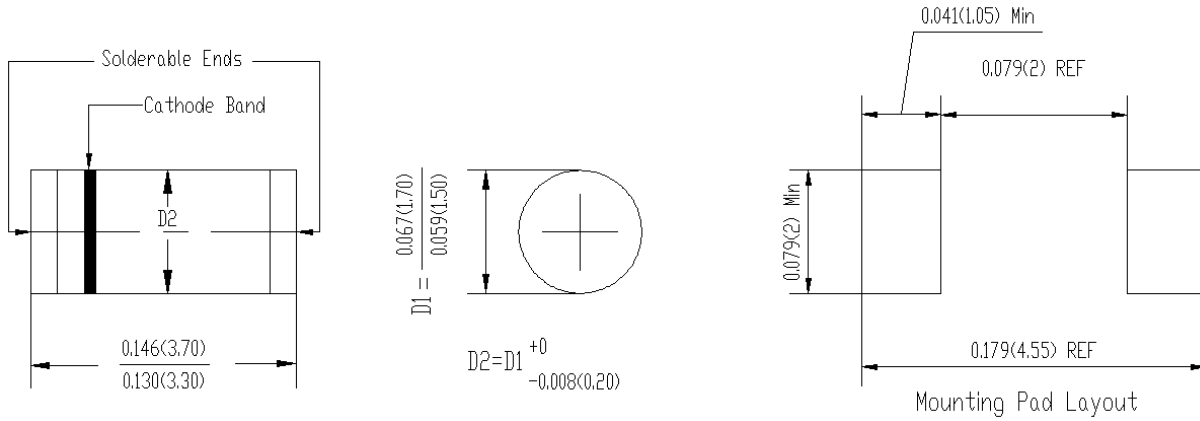


Figure 6. Typical Transient Thermal Impedance

Package Outline Dimensions

in inches (millimeters)

DO-213AA



Packing Information

Packing quantities

2500 pcs/Reel, 7" Reel
 or 9000 pcs/Reel, 13" Reel
 Weight: 0.033g per unit