

Surface Mount Schottky Barrier Rectifier

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, 10 s
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC



DO-213AA

TYPICAL APPLICATIONS

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

PRIMARY CHARACTERISTICS	
$I_{F(AV)}$	2 A
V_{RRM}	20 V to 100 V
I_{FSM}	45 A
V_F	0.55 , 0.85V
$T_J \text{ max.}$	150 °C

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 (TA = 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 $T_T = 75\text{ °C}$	$I_{F(AV)}$	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	TA=25 TA=125	I _R	0.5			20				mA
Typical junction capacitance	4.0 V, 1 MHz	C _J	75							pF

THERMAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)										
PARAMETER	SYMBOL	SGL2A	SGL2B	SGL2D	SGL2G	SGL2J	SGL2K	SGL2M	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

ORDERING INFORMATION (Example)			
PREFERRED P/N	UNIT WEIGHT (g)	BASE QUANTITY	DELIVERY MODE
SGL2D-HM32	0.033	2500	7" diameter plastic tape and reel
SGL2D-HK32	0.033	9000	13" diameter plastic tape and reel

RATINGS AND CHARACTERISTICS CURVES

(T_A = 25 °C unless otherwise noted)

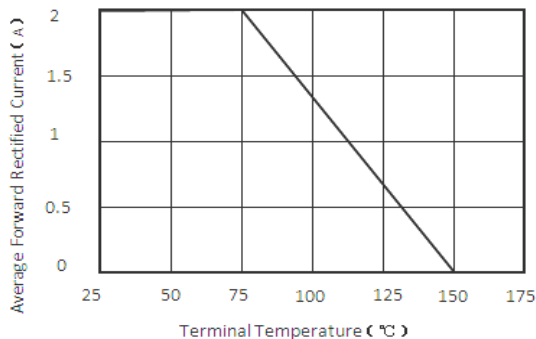


Figure 1. Forward Current Derating Curve

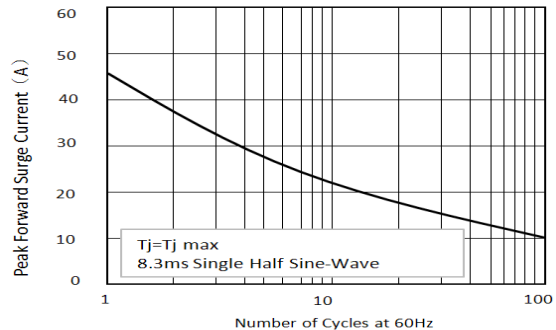


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

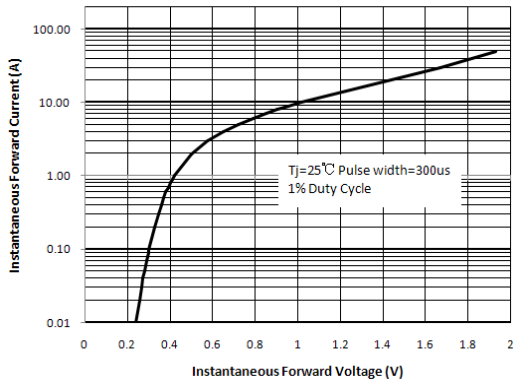


Figure 3. Typical Instantaneous Forward Characteristics

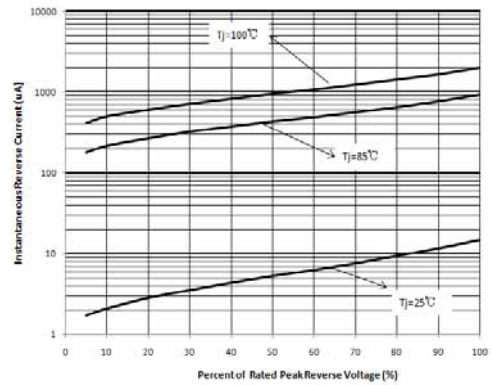


Figure 4. Maximum Non-Repetitive Peak Forward Surge Current

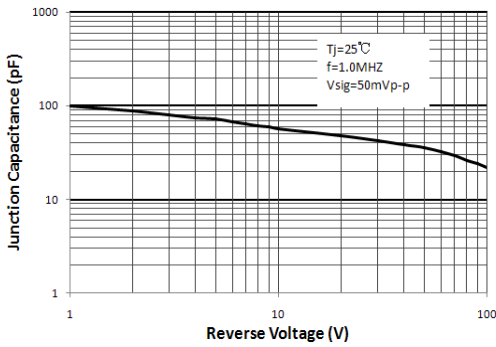


Figure 5. Typical Junction Capacitance

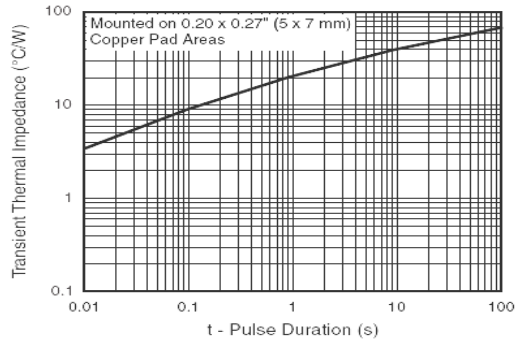


Figure 6. Typical Transient Thermal Impedance

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

DO-213AA (GL34)

