

SMD Schottky Barrier Diode



CDBG820-G THRU CDBG860-G (RoHS Device)

Reverse Voltage: 20 ~ 60 Volts

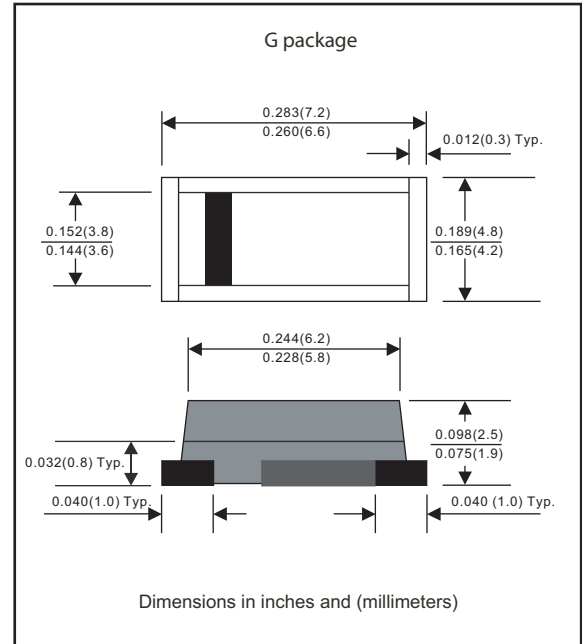
Forward Current: 8 A

Features:

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing Flame Retardant Epoxy Molding Compound.
- For surface mounted applications.
- Exceeds environmental standards of MIL-S-19500/228
- Low leakage current

Mechanical Data:

- Case: Molded plastic, G package (6.9mmx4.5mm)
- Terminals: Solder plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band
- Mounting position: Any
- Approx. Weight: 0.00585 ounce, 0.195 gram



Maximum Ratings (at $T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	CDBG820-G	CDBG830-G	CDBG840-G	CDBG850-G	CDBG860-G	Unit
Marking Code		SS82	SS83	SS84	SS85	SS86	
Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	V
RMS voltage	V_{RMS}	14	21	28	35	42	V
Continuous reverse voltage	V_R	20	30	40	50	60	V
Maximum forward voltage	V_F	0.55			0.70		V
Max. Forward rectified current (See Fig.1)	I_O	8.0					A
Max. Forward surge current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	150					A
Max. Reverse current $V_R = V_{RRM}$ $T_A = 25^\circ\text{C}$ $V_R = V_{RRM}$ $T_A = 100^\circ\text{C}$	I_R	1.0			50		mA
Thermal resistance Junction Ambient	R_{JA}	55					
Diode junction capacitance $f=1\text{MHz}$ and applied 4vDC reverse Voltage	C_j	700					pF
Max. Storage temperature	T_{STG}	+150					$^\circ\text{C}$
Operating temperature		-55 to +125					$^\circ\text{C}$



RATING AND CHARACTERISTIC CURVES (CDBG820-G THRU CDBG860-G)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

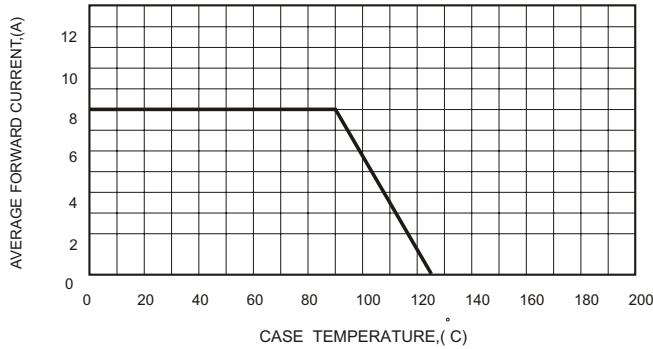


FIG.2-TYPICAL FORWARD CHARACTERISTICS

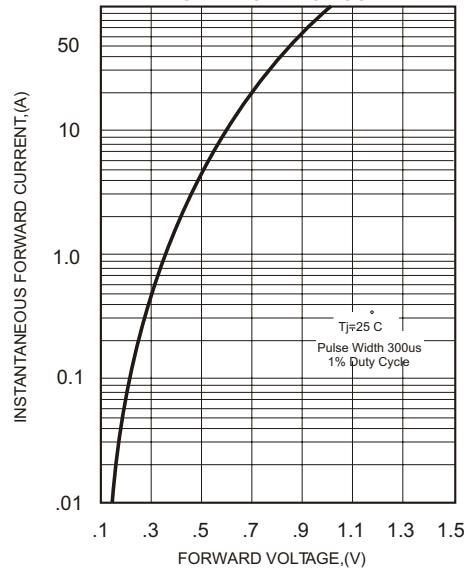


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

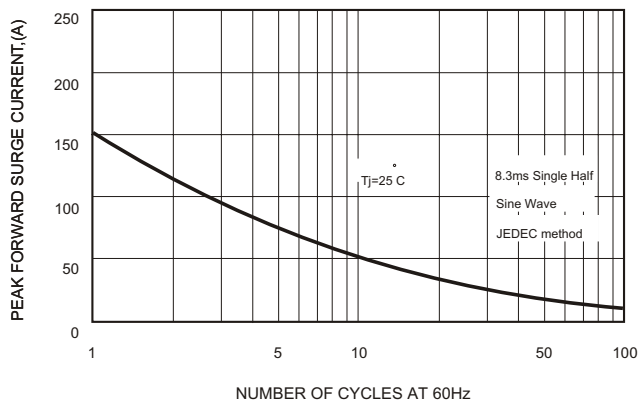


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

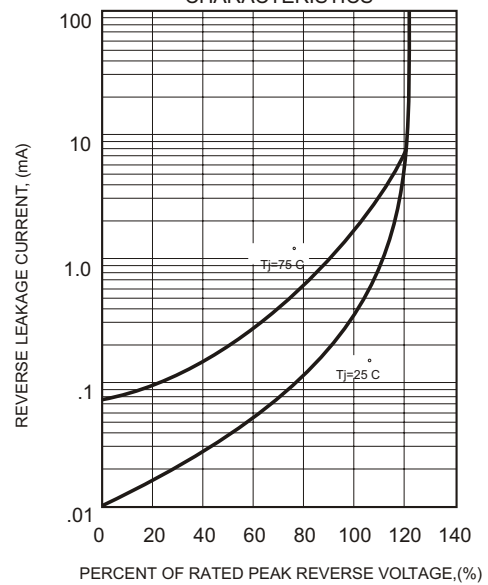


FIG.4-TYPICAL JUNCTION CAPACITANCE

