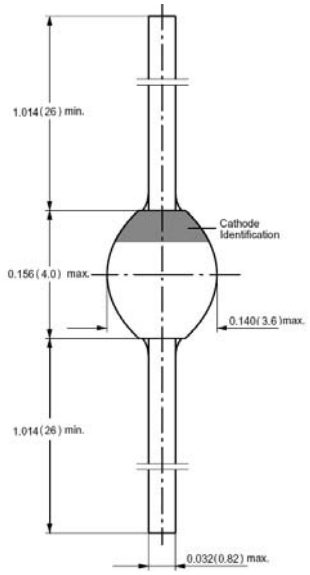
GOOD-ARK
SEMICONDUCTOR

GSV03G
Sintered Glass Junction Avalanche Rectifier

Features

- Glass passivated
- Hermetically sealed package
- Low reverse current
- Soft recovery characteristics



Dimensions in inches (millimeters)

Package: SOD-57

Mechanical Data

- Case: SOD-57 sintered glass case
- Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
- Polarity: color band denotes cathode end
- Mounting position: any

Absolute Maximum Ratings and Electrical Characteristics

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

Parameter	Symbol	Value	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	V
Maximum DC blocking Voltage	V_{DC}	600	V
Maximum Average Forward Rectified Current 3/8"lead length at T_A=55°C	I_{FAV}	1.5	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	50	A
Maximum Forward Voltage at rated Forward Current and 25°C	V_F	1.1	V
Maximum DC Reverse Current at V_{DC} =600V and 25°C	I_R	5.0	μA
Maximum DC Reverse Current at V_{DC} =650V and 25°C	I_R	5.0	μA
Maximum DC Reverse Current at V_{DC} =700V and 25°C	I_R	25.0	μA
Maximum DC Reverse Current at V_{DC} =600V and 150°C	I_R	200	μA
Typical Reverse Recovery Time (Note 1)	Trr	2.0	μs
Typical Junction Capacitance (Note 2)	Cj	25.0	pF
Typical Thermal Resistance (Note 3)	Rth(ja)	45.0	°C/W
Storage and Operating Junction Temperature	Tstg, Tj	-65 to +175	°C

Note:
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

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Ratings and Characteristic Curves

FIG. 1 - FORWARD CURRENT DERATING CURVE

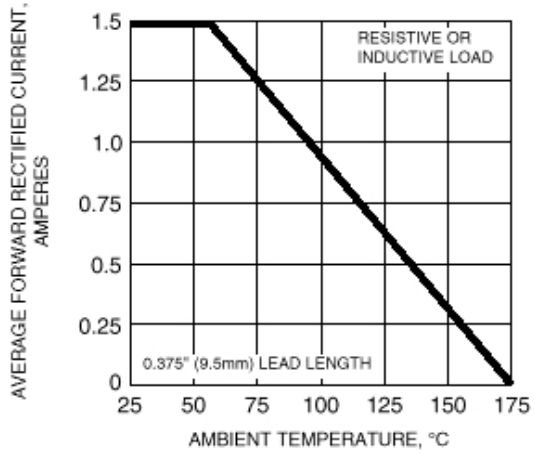

FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

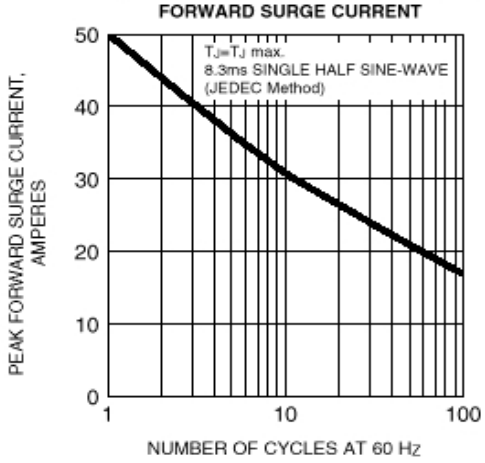

FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

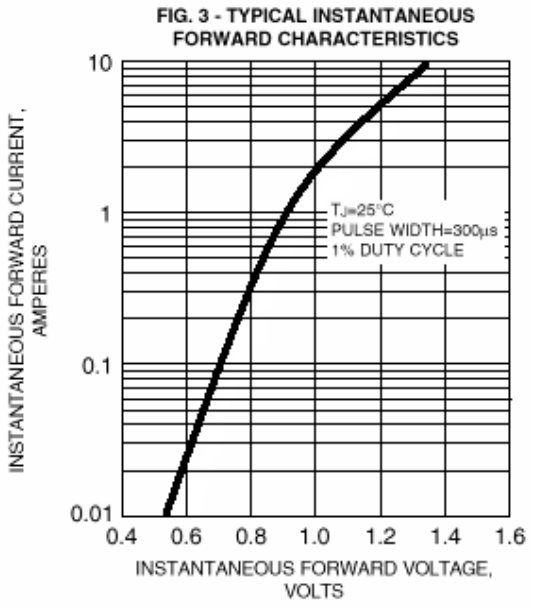

FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

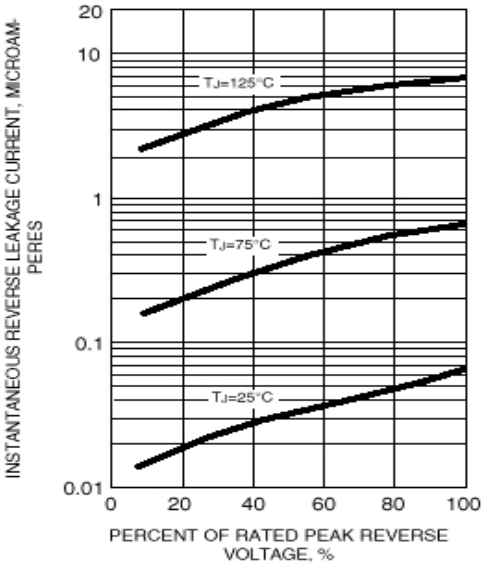

FIG. 5 - TYPICAL JUNCTION CAPACITANCE