

BYV26G

SINTERED GLASS JUNCTION FAST AVALANCHE RECTIFIER

VOLTAGE: 1400V

CURRENT: 1.05A



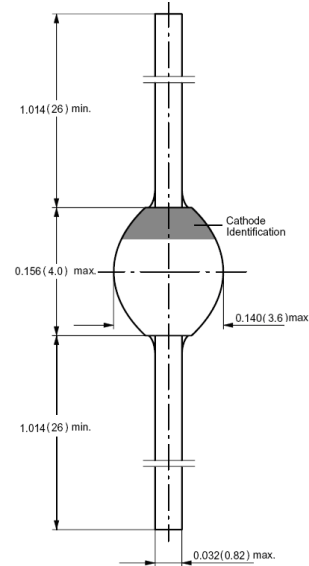
FEATURE

Glass passivated
High maximum operating temperature
Low leakage current
Excellent stability
Guaranteed avalanche energy absorption capability

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

SOD-57



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	BYV26G	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1400	V
Maximum RMS Voltage	V_{RMS}	980	V
Maximum DC blocking Voltage	V_{DC}	1400	V
Reverse avalanche breakdown voltage $I_R = 0.1 \text{ mA}$	$V_{(BR)R}$	1500min	V
Maximum Average Forward Rectified Current 3/8" lead length at $T_{tp} = 85^\circ\text{C}$	I_{FAV}	1.05	A
Non-repetitive Peak Forward Current at $t = 10\text{ms}$ half sine wave	I_{FSM}	30	A
Maximum Forward Voltage at 1.0A	V_F	2.15	V
Non-repetitive peak reverse avalanche energy (Note 1)	E_{RSM}	10	mJ
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at rated DC blocking voltage $T_a = 165^\circ\text{C}$	I_R	5.0 150.0	μA μA
Maximum Reverse Recovery Time (Note 2)	T_{rr}	150	nS
Diode Capacitance (Note 3)	C_d	35	pF
Typical Thermal Resistance (Note 4)	$R_{th(ja)}$	100	K/W
Storage and Operating Junction Temperature	T_{stg}, T_j	-65 to +175	$^\circ\text{C}$

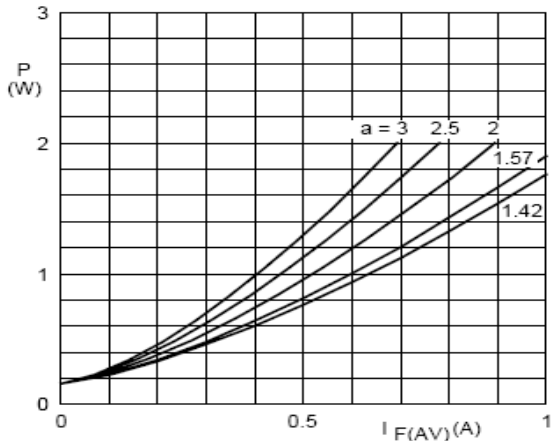
Note:

- $I_R = 400\text{mA}$; $T_j = T_{jmax}$ prior to surge; inductive load switched off
- Reverse Recovery Condition $I_f = 0.5\text{A}$, $I_r = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$
- Measured at 1.0 MHz and applied reverse voltage of 0Vdc
- Device mounted on an epoxy-glass printed-circuit board, 1.5mm thick

Rev.A1

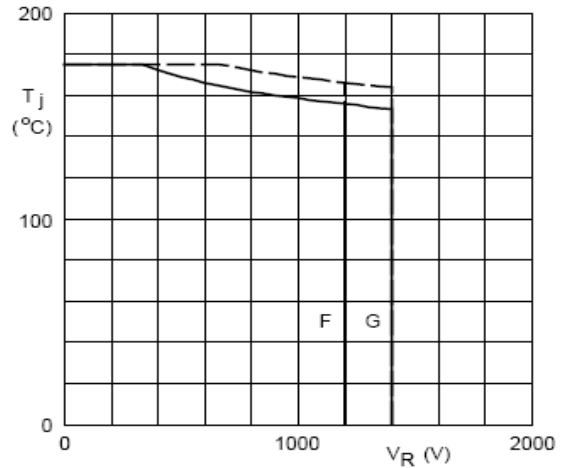
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RATINGS AND CHARACTERISTIC CURVES BYV26G



$a = I_{F(RMS)}/I_{F(AV)}$; $V_R = V_{RRMmax}$; $\delta = 0.5$.

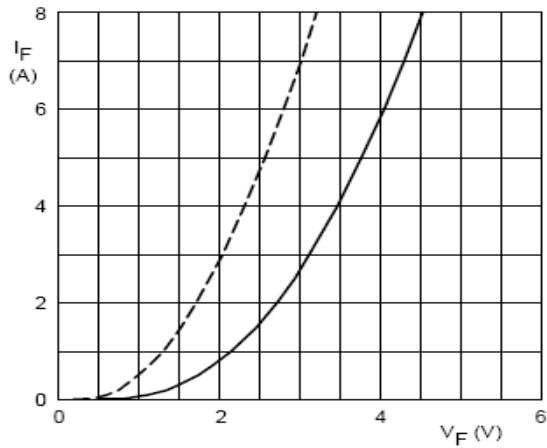
Fig. 1 Maximum steady state power dissipation (forward plus leakage current losses, excluding switching losses) as a function of average forward current.



Solid line = V_R .

Dotted line = V_{RRM} ; $\delta = 0.5$.

Fig. 2 Maximum permissible junction temperature as a function of reverse voltage.



Dotted line: $T_j = 175 \text{ }^\circ\text{C}$.

Solid line: $T_j = 25 \text{ }^\circ\text{C}$.

Fig. 3 Forward current as a function of forward voltage; maximum values.

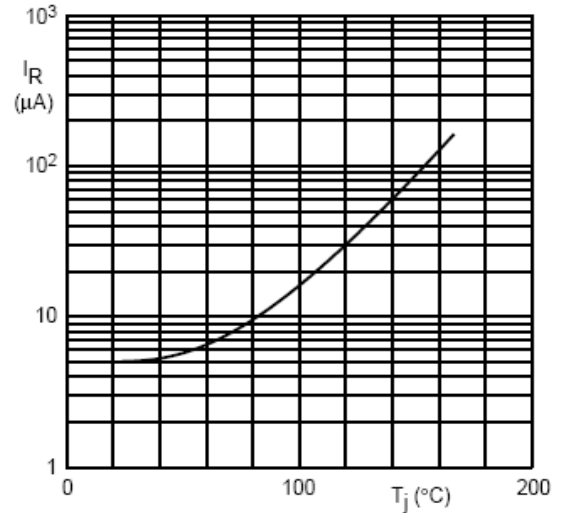
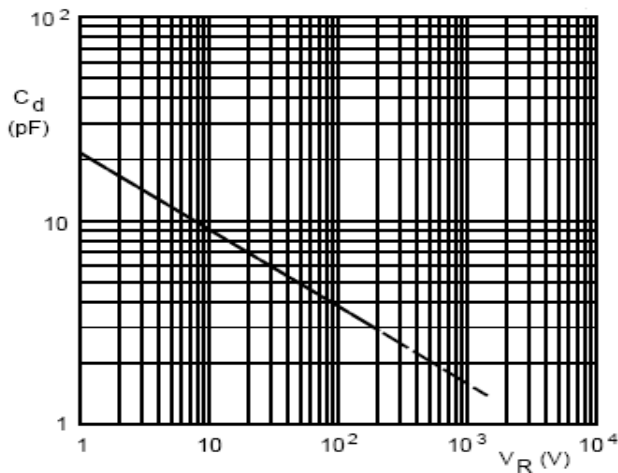


Fig. 4 Reverse current as a function of junction temperature; maximum values.



$f = 1 \text{ MHz}$; $T_j = 25 \text{ }^\circ\text{C}$.

Fig. 5 Diode capacitance as a function of reverse voltage, typical values.