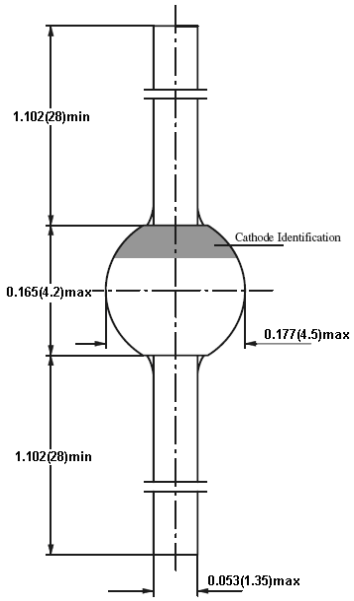
BYT56M

SINTERED GLASS JUNCTION FAST AVALANCHE RECTIFIER

Reverse Voltage - 1000 V
Forward Current - 3.0 A

SOD-64



Dimensions in inches and (millimeters)

FEATURE

Glass passivated
Hermetically sealed package
Low reverse current
Soft recovery characteristics

MECHANICAL DATA

Case: SOD-64 sintered glass case
Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
Polarity: color band denotes cathode end
Mounting position: any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	BYT56M	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS Voltage	V_{RMS}	700	V
Maximum DC blocking Voltage	V_{DC}	1000	V
Maximum Average Forward Rectified Current 3/8"lead length at l =10mm	I_{FAV}	3.0	A
Peak Forward Surge Current at tp=10ms,half sinewave	I_{FSM}	80	A
Maximum Forward Voltage at rated Forward Current at IF=3.0A	V_F	1.4	V
Non-repetitive peak reverse avalanche energy at $I_{BR(R)}$=0.4A	E_{RSM}	10	mJ
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =150°C	I_R	5.0 150.0	μA μA
Maximum Reverse Recovery Time (Note 1)	Trr	100	nS
Typical Thermal Resistance (Note 2)	Rth(ja)	70	°C /W
Storage and Operating Junction Temperature	Tstg, Tj	-55 to +175	°C

Note:
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. on PC board with spacing 25 mm

RATINGS AND CHARACTERISTIC CURVES

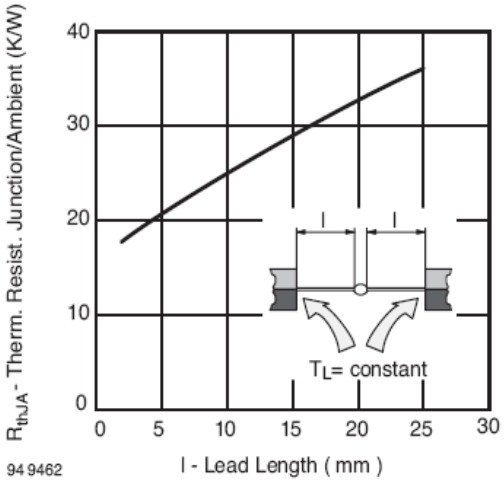


Figure 1. Max. Thermal Resistance vs. Lead Length

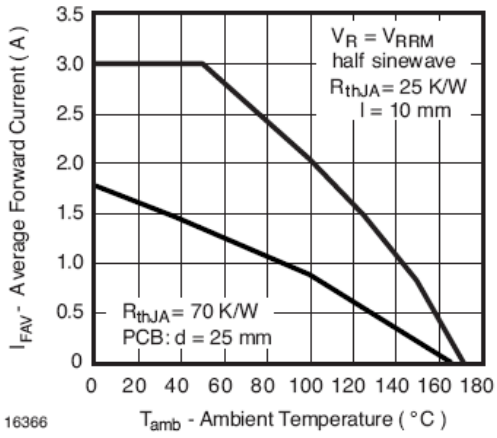


Figure 3. Max. Average Forward Current vs. Ambient Temperature

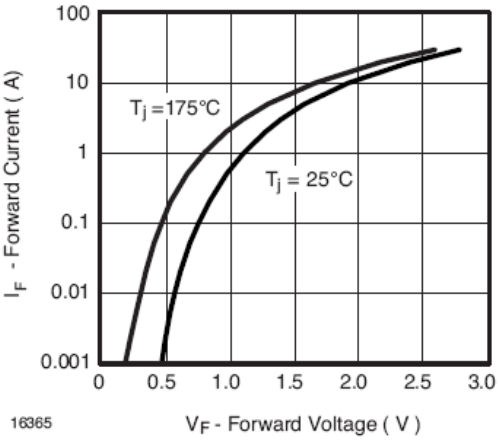


Figure 2. Forward Current vs. Forward Voltage

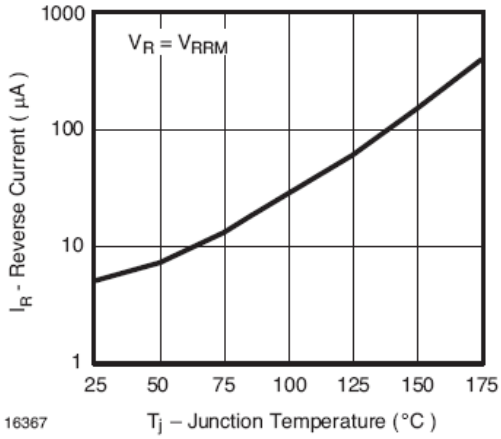


Figure 4. Reverse Current vs. Junction Temperature

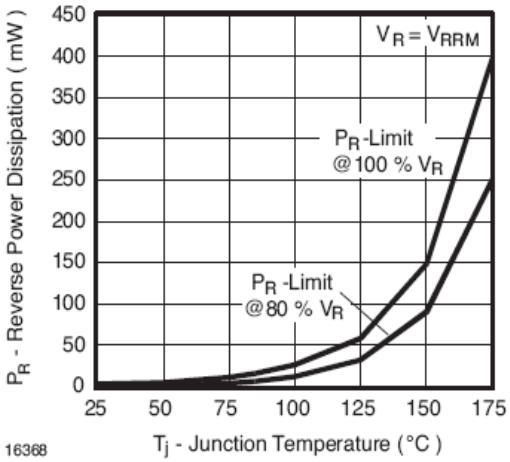


Figure 5. Max. Reverse Power Dissipation vs. Junction Temperature

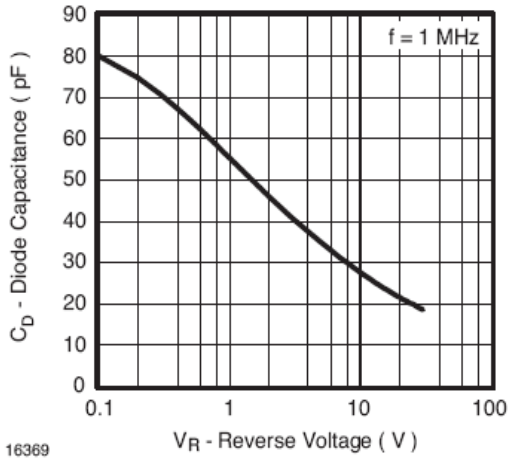


Figure 6. Diode Capacitance vs. Reverse Voltage