BYT52MGR

SINTERED GLASS JUNCTION
FAST SWITCHING PLASTIC RECTIFIER

VOLTAGE: 1000V **CURRENT: 1.4A**

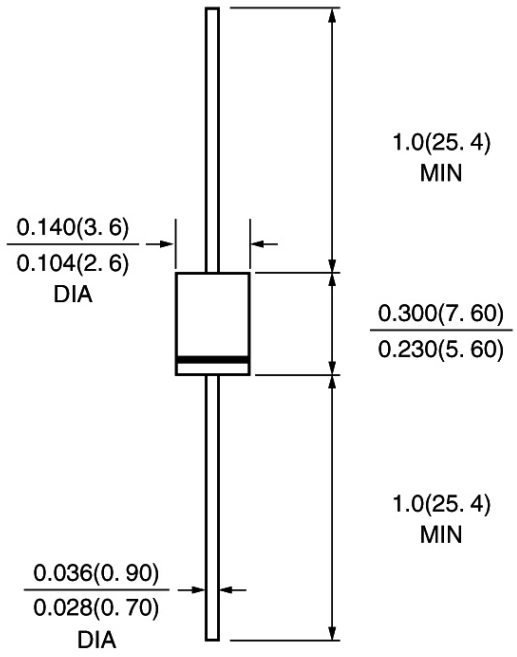
FEATURE

High temperature metallurgic ally bonded construction
Sintered glass cavity free junction
Capability of meeting environmental standard of MIL-S-19500
High temperature soldering guaranteed
350°C /10sec/0.375”lead length at 5 lbs tension

MECHANICAL DATA

Terminal: Plated axial leads solderable per
MIL-STD 202E, method 208C
Case: Molded with UL-94 Class V-0 recognized Flame
Retardant Epoxy
Polarity: color band denotes cathode
Mounting position: any

DO-15



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	BYT52MGR	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 at l=10mm	I_{FAV}	1.4	A
Peak Forward Surge Current at Tp=10ms half sinewave	I_{FSM}	50.0	A
Maximum Forward Voltage at Forward Current 1.0A and 25°C	V_F	1.30	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =150°C	I_R	5.0 150	μA μA
Maximum Reverse Recovery Time (Note 1)	Trr	200	nS
Typical Thermal Resistance (Note 2)	Rth(ja)	100	K/W
Storage and Operating Junction Temperature	Tstg, Tj	-55 to +175	℃

Note:
1. Reverse Recovery Condition I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
2. on P.C. board with spacing 20mm

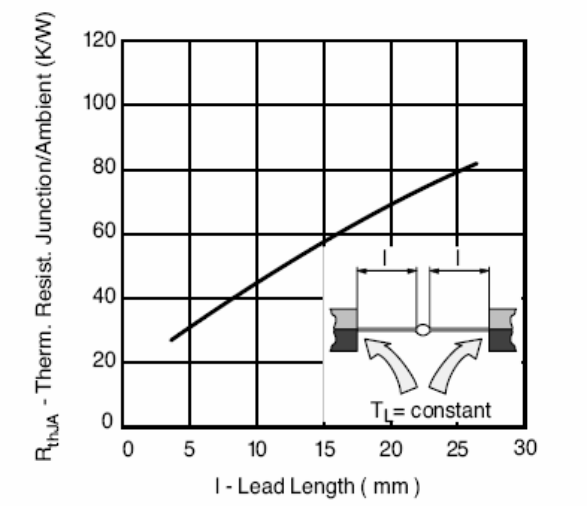


Figure 1. Max. Thermal Resistance vs. Lead Length

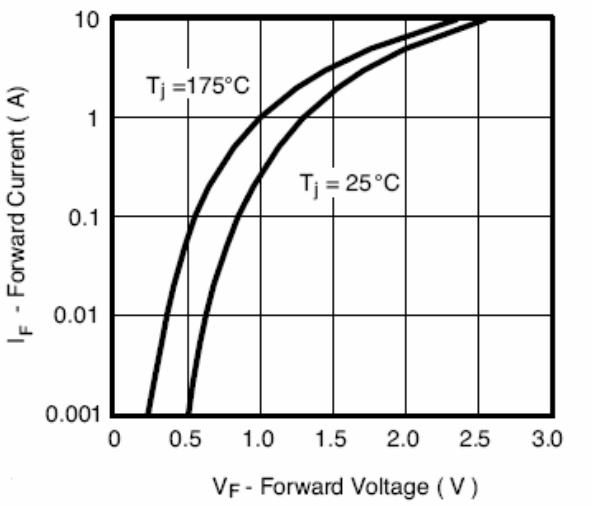


Figure 2. Forward Current vs. Forward Voltage

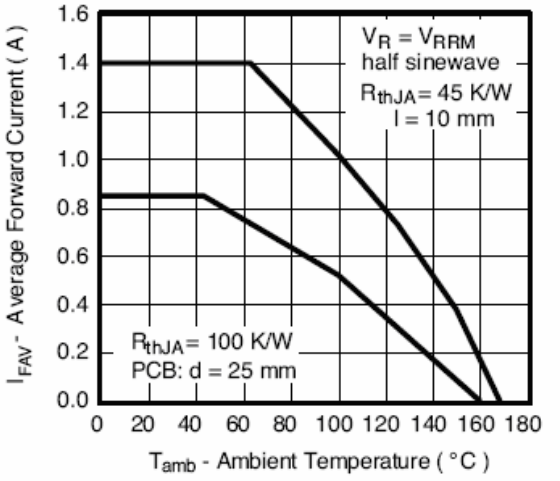


Figure 3. Max. Average Forward Current vs. Ambient Temperature

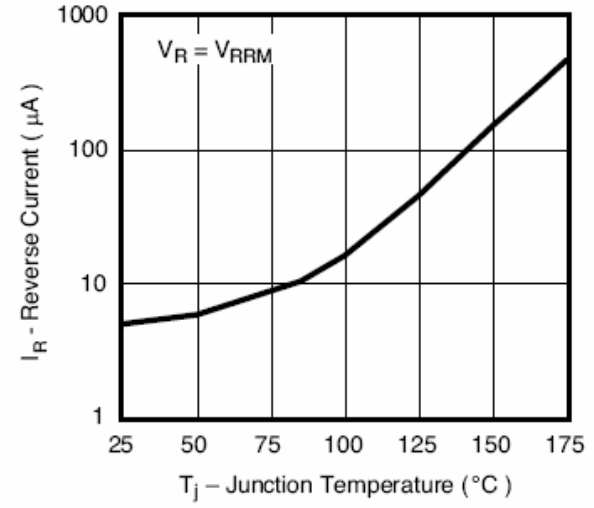


Figure 4. Reverse Current vs. Junction Temperature

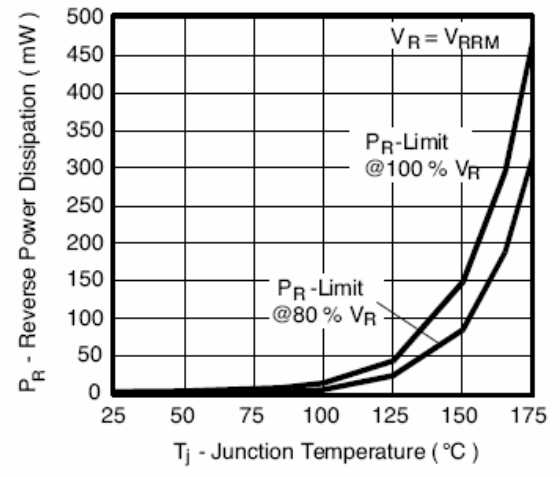


Figure 5. Max. Reverse Power Dissipation vs. Junction Temperature

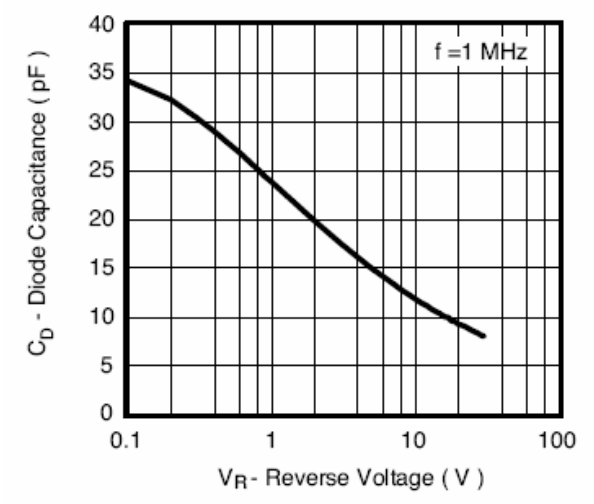


Figure 6. Diode Capacitance vs. Reverse Voltage