

BYT52A - BYT52M

PRV : 50 - 1000 Volts
Io : 1.4 Amperes

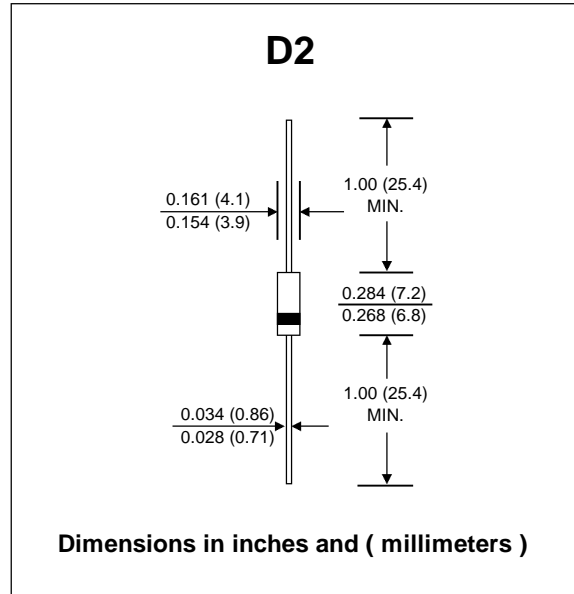
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Fast switching for high efficiency
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : D2 Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.465 gram

FAST RECOVERY RECTIFIERS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

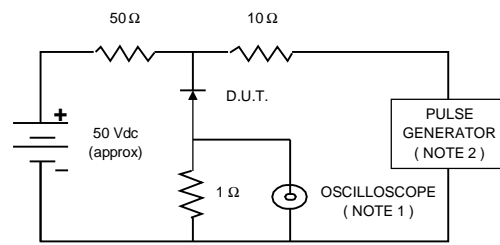
RATING	SYMBOL	BYT 52A	BYT 52B	BYT 52D	BYT 52G	BYT 52J	BYT 52K	BYT 52M	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum Reverse Voltage	VR	50	100	200	400	600	800	1000	V
Maximum Average Forward Current	IF(AV)	0.85 (on PC Board)							A
		1.4 (L = 10 mm, TL = 25°C)							
Maximum Peak Forward Surge Current, (tp = 10 ms, half sinewave)	IFSM	50							A
Maximum Forward Voltage at IF = 1.0 A	VF	1.3							V
Maximum Reverse Current (VR = VRRM)	IR	10 (Tj = 25°C)							µA
	IR(H)	150 (Tj = 150°C)							µA
Maximum Reverse Recovery Time (IF = 0.5 A, IR = 1.0 A, Irr = 0.25 A.)	Trr	200							ns
Maximum Junction Ambient Thermal Resistance (L = 10mm, TL = Constant)	RthJA	45							K/W
Junction Temperature Range	TJ	- 65 to + 175							°C
Storage Temperature Range	TSTG	- 65 to + 175							°C

Note :

- (1) Reverse Recovery Test Conditions

RATING AND CHARACTERISTIC CURVES (BAT52A - BAT52M)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES: 1. Rise Time = 7 ns max., Input Impedance = 1 megaohm, 22 pF.
 2. Rise time = 10 ns max., Source Impedance = 50 ohms.
 3. All Resistors = Non-inductive Types.

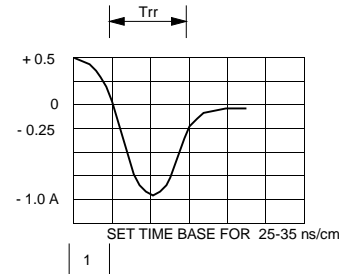


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

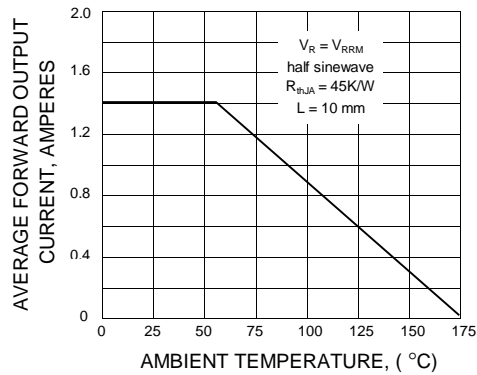


FIG.3 - MAXIMUM THERMAL RESISTANCE vs. LEAD LENGTH

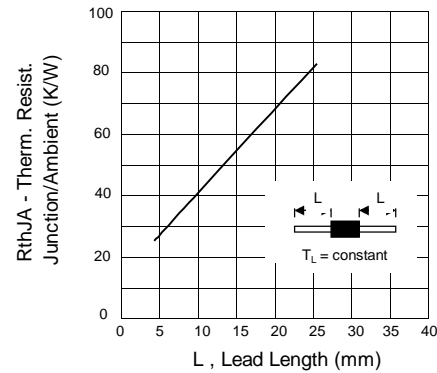


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

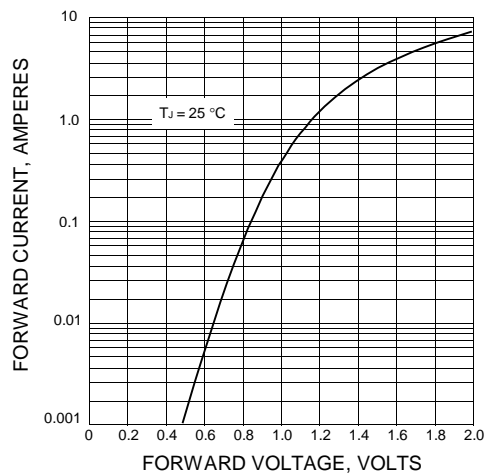


FIG.5 - REVERSE CURRENT vs. JUNCTION TEMPERATURE

