

BYT56A - BYT56M

PRV : 50 - 1000 Volts
Io : 3.0 Amperes

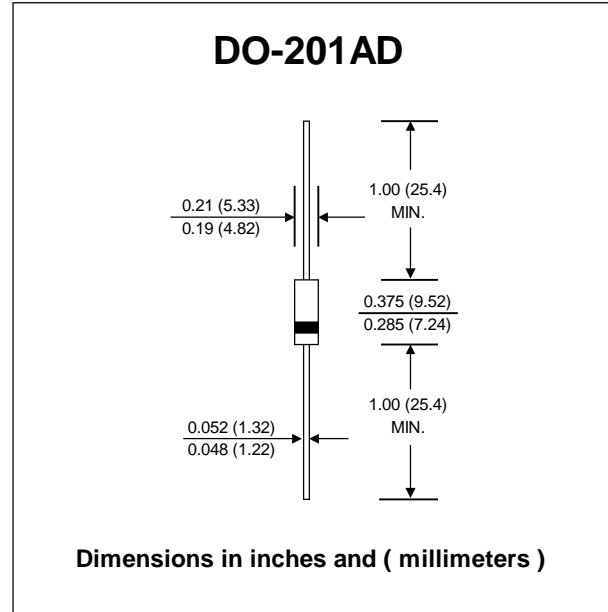
FEATURES :

- * 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 : DO-201AD 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 : 1.16 grams

FAST RECOVERY RECTIFIERS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

| RATING | SYMBOL | BYT 56A | BYT 56B | BYT 56D | BYT 56G | BYT 56J | BYT 56K | BYT 56M | UNIT |
|---|--------------------|---|---------|---------|---------|---------|---------|---------|------|
| Maximum Repetitive Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Reverse Voltage | V _R | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Current | I _{F(AV)} | 1.5 (on PC Board) | | | | | | | A |
| | | 3.0 (L = 10 mm, T _L = 25°C) | | | | | | | |
| Maximum Peak Forward Surge Current, (t _p = 10 ms, half sinewave) | I _{FSM} | 80 | | | | | | | A |
| Maximum Forward Voltage at I _F = 3 A | V _F | 1.4 | | | | | | | V |
| Maximum Reverse Current (V _R = V _{RRM}) | I _R | 5 (T _j = 25°C) | | | | | | | μA |
| | I _{R(H)} | 150 (T _j = 150°C) | | | | | | | μA |
| Maximum Reverse Recovery Time (I _F = 0.5 A, I _R = 1.0 A, I _{rr} = 0.25 A.) | T _{rr} | 100 | | | | | | | ns |
| Maximum Junction Ambient Thermal Resistance (L = 10mm, T _L = Constant) | R _{thJA} | 25 | | | | | | | K/W |
| Junction Temperature Range | T _J | - 55 to + 175 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | - 55 to + 175 | | | | | | | °C |

Note :

- (1) Reverse Recovery Test Conditions

RATING AND CHARACTERISTIC CURVES (BAT56A - BAT56M)

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

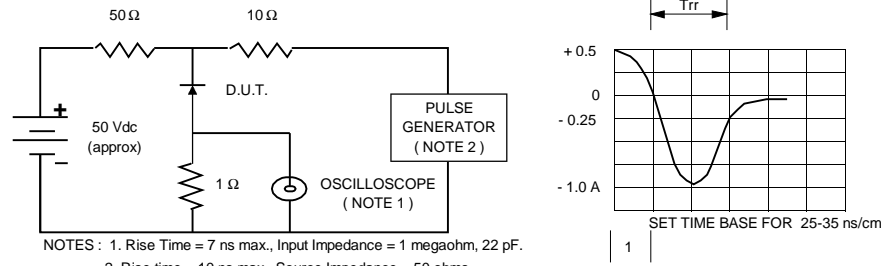


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

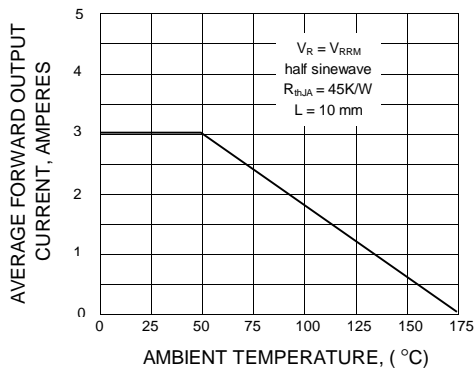


FIG.3 - MAXIMUM THERMAL RESISTANCE vs. LEAD LENGTH

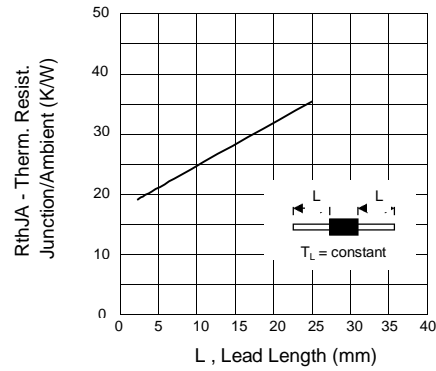


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

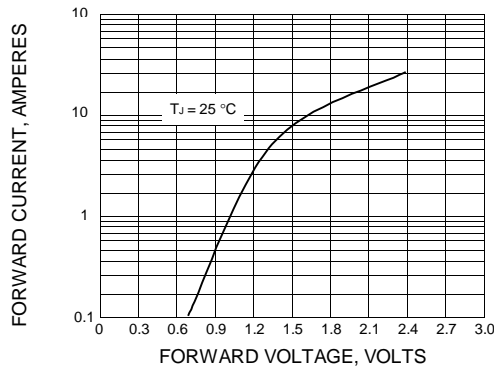


FIG.5 - REVERSE CURRENT vs. JUNCTION TEMPERATURE

