

BYT56AGP THRU BYT56MGP

SINTERED GLASS JUNCTION

FAST SWITCHING PLASTIC RECTIFIER

VOLTAGE:50 TO 1000V

CURRENT: 3.0A

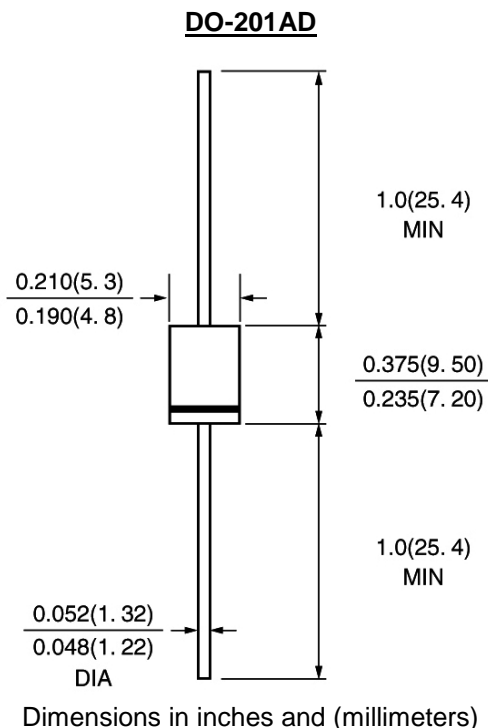


FEATURE

High temperature metallurgically 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
Operate at $T_a = 55^\circ\text{C}$ with no thermal run away
Typical $I_r < 0.1\mu\text{A}$

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



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	BYT56 AGP	BYT56 BGP	BYT56 DGP	BYT56 GGP	BYT56 JGP	BYT56 KGP	BYT56 MGP	units
Maximum Recurrent Peak Reverse Voltage	V_{rrm}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{rms}	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V_{dc}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8"lead length at $T_a = 55^\circ\text{C}$	$I_{f(av)}$	3.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{fsm}	125							A
Maximum Forward Voltage at rated Forward Current and 25°C	V_f	1.4							V
non-repetitive reverse avalanche energy ($I_{(BR)R} = 0.4A$)	E_R	10							mJ
Maximum full load reverse current full cycle average at 55°C Ambient	$I_{r(av)}$	100							μA
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at rated DC blocking voltage $T_a = 150^\circ\text{C}$	I_r	5.0 100							μA μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	100							nS
Typical Junction Capacitance (Note 2)	C_j	60							pF
Typical Thermal Resistance (Note 3)	$R(ja)$	20							$^\circ\text{C}/W$
Storage and Operating Junction Temperature	T_{stg}, T_j	-65 to +175							$^\circ\text{C}$

Note: 1.Reverse Recovery Condition $I_f = 0.5A$, $I_r = 1.0A$, $I_{rr} = 0.25A$

2.Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc

3.Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES BYT56AGP THRU BYT56MGP

FIG. 1 - FORWARD CURRENT DERATING CURVE

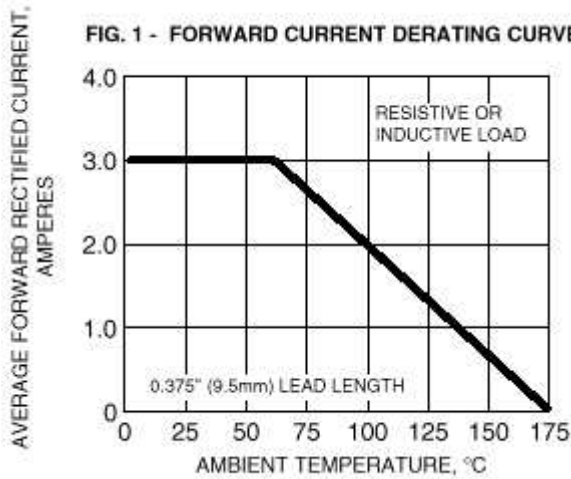


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

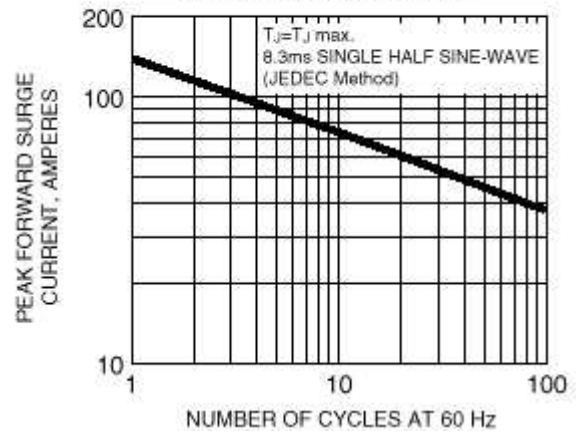


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

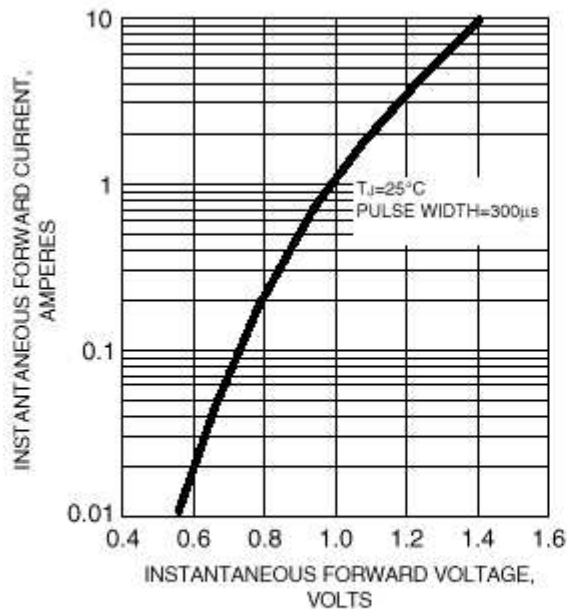


FIG. 4 - TYPICAL REVERSE CHARACTERISTIC

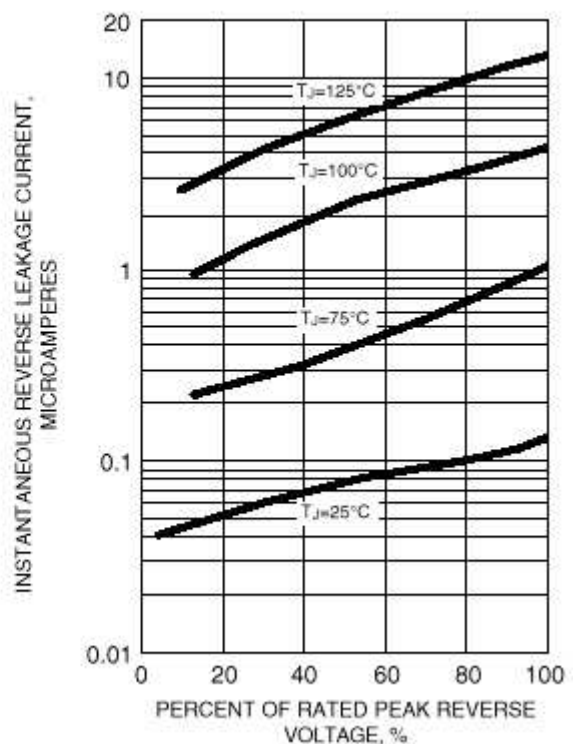


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

