BYT42AGP THRU BYT42MGP

SINTERED GLASS JUNCTION
FAST SWITCHING PLASTIC RECTIFIER
VOLTAGE:50 TO 1000V CURRENT: 1.25A

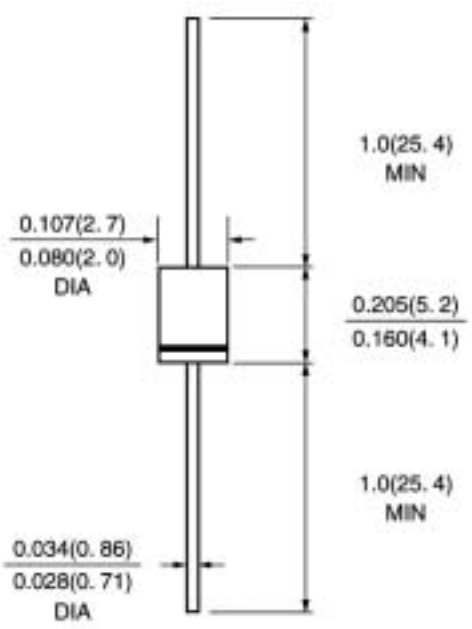
FEATURE

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 Ta =55°C with no thermal run away
Typical Ir<0.1μA
Fast Soft Recovery Rectifier

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-41\DO-204AL



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	BYT42 AGP	BYT42 BGP	BYT42 DGP	BYT42 GGP	BYT42 JGP	BYT42 KGP	BYT42 MGP	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	Vdc	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	If(av)	1.25							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	30.0							A
Maximum Forward Voltage at rated Forward Current and 25°C	Vf	1.4							V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =150°C	Ir	5.0 150.0							μA μA
Maximum Reverse Recovery Time (Note 1)	Trr	150					200		nS
Non repetitive reverse avalanche energy $I_{(BR)R}$=0.4A	ER	10.0							mJ
Typical Thermal Resistance (Note 2)	R(ja)	55.0							°C /W
Storage and Operating Junction Temperature	Tstg, Tj	-65 to +175							°C

Note:
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

[1]

Figure1 . Max. Average Forward Current vs. Ambient Temperature

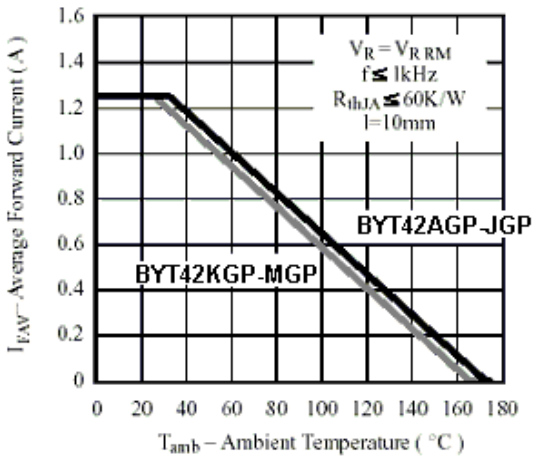


Figure 2. Max. Forward Current vs. Forward Voltage

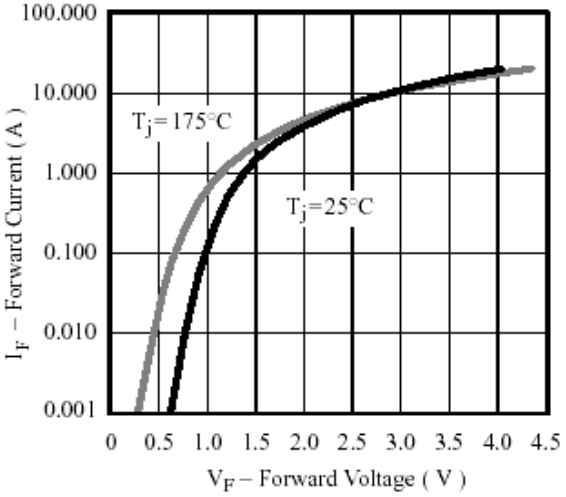


Figure 3. Max. Reverse Current vs. Junction Temperature

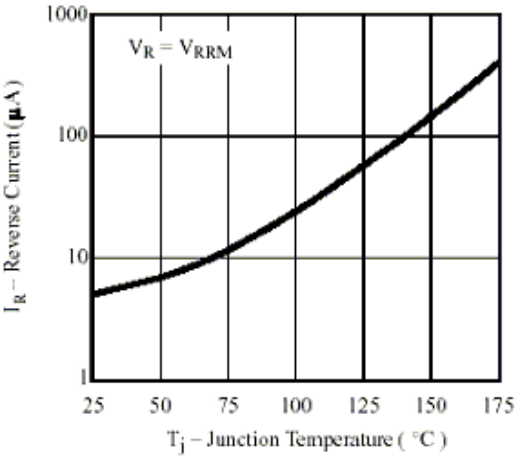


Figure 4. Diode Capacitance vs. Reverse Voltage

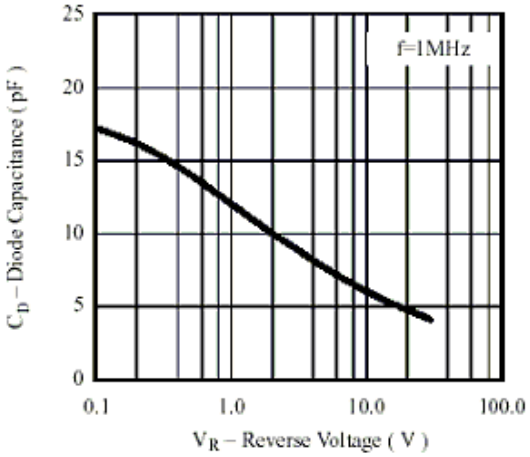
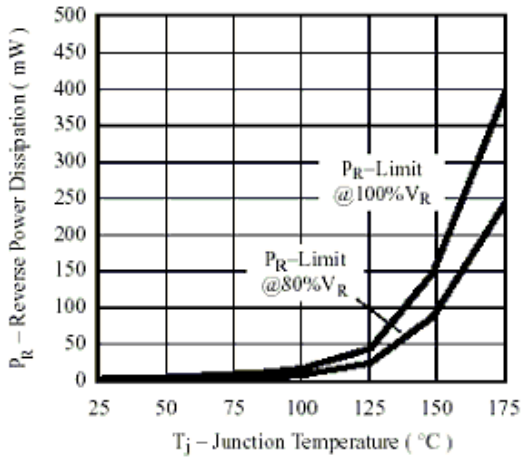


Figure 5. Max. Reverse Power Dissipation vs. Junction Temperature



[1] Rev.A1, 15-Nov-05