# **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

Fast Soft Recovery Rectifier

Typical Ir<0.1µA

#### **MECHANICAL DATA**

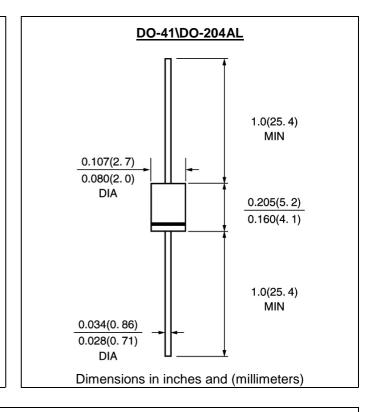
Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C

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	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							А
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	30.0							Α
Maximum Forward Voltage at rated Forward Current and 25°C	Vf	1.4							V
Maximum DC Reverse Current Ta =25°C	lr	5.0							μΑ
at rated DC blocking voltage Ta =150°C	" 150.0								μΑ
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

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#### RATINGS AND CHARACTERISTIC CURVES BYT42AGP THRU BYT42MGP

Figure1 . Max. Average Forward Current vs. Ambient Temperature

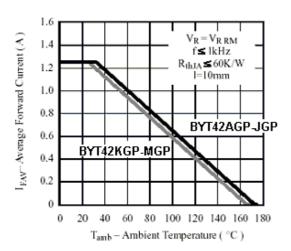


Figure 2. Max. Forward Current vs. Forward Voltage

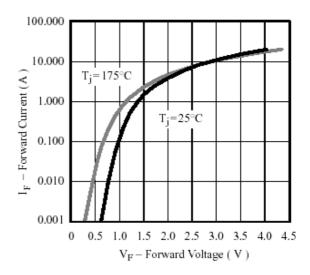


Figure 3. Max. Reverse Current vs. Junction Temperature

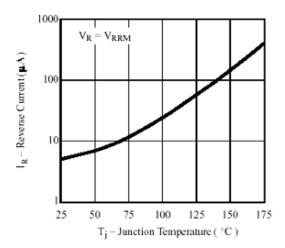


Figure 4. Diode Capacitance vs. Reverse Voltage

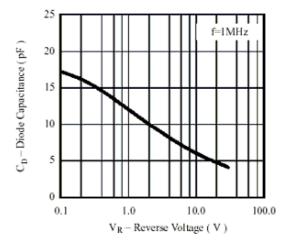
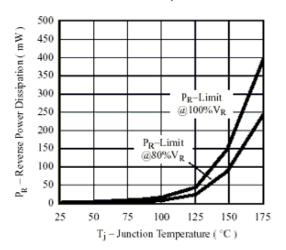


Figure 5. Max. Reverse Power Dissipation vs. Junction Temperature



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