

# BYT43JGP



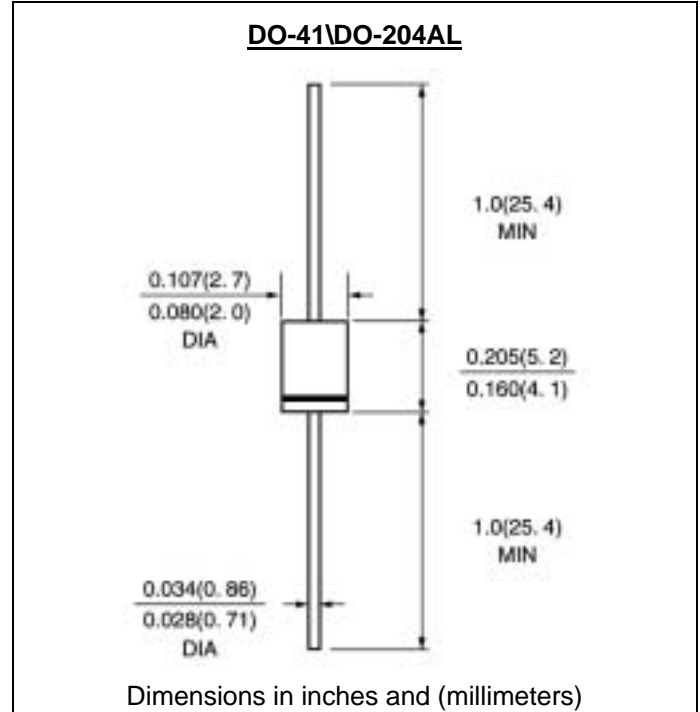
**SINTERED GLASS JUNCTION  
FAST SWITCHING PLASTIC RECTIFIER**  
VOLTAGE: 600V                      CURRENT: 1.0A

## 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 Ta =55°C with no thermal run away  
Typical Ir<0.2µA  
Low power loss, high efficient

## 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	BYT43JGP	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	600	V
Maximum RMS Voltage	Vrms	420	V
Maximum DC blocking Voltage	Vdc	600	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	If(av)	1.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	30	A
Maximum Forward Voltage at rated Forward Current and 25°C	Vf	1.6	V
Maximum full load reverse current full cycle average at 55°C Ambient	Ir(av)	100	µA
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =150°C	Ir	5.0 150	µA µA
Maximum Reverse Recovery Time (Note 1)	Trr	50	nS
Typical Junction Capacitance (Note 2)	Cj	15	pF
Typical Thermal Resistance (Note 3)	R(ja)	60	°C/W
Storage and Operating Temperature Range	Tstg, Tj	-65 to +175	°C

### Note:

1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =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 BYT43JGP

Figure 1. Max. Average Forward Current vs. Ambient Temperature

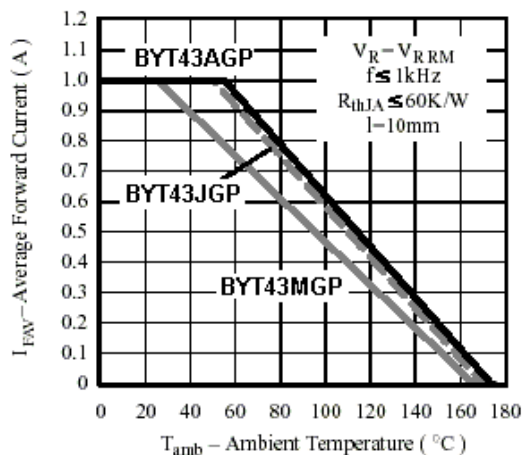


Figure 2. Max. Forward Current vs. Forward Voltage

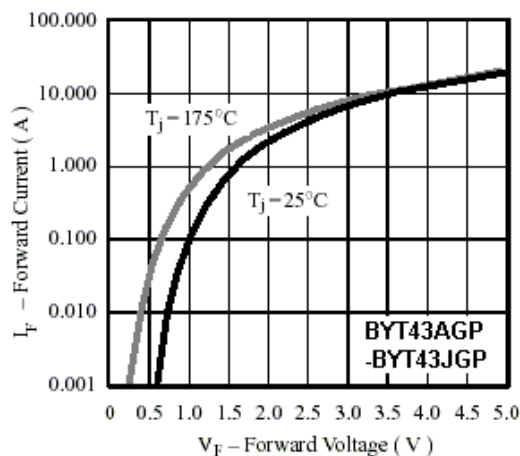


Figure 3. Max. Forward Current vs. Forward Voltage

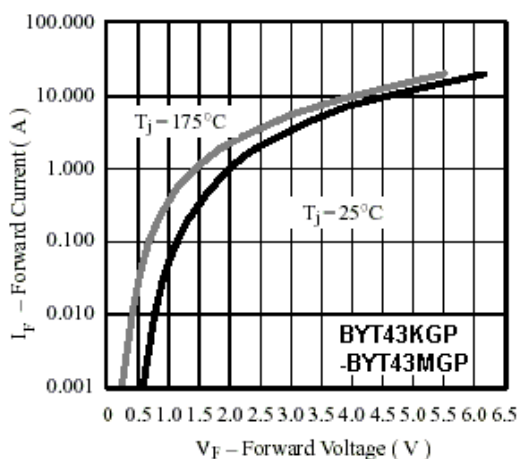


Figure 4. Diode Capacitance vs. Reverse Voltage

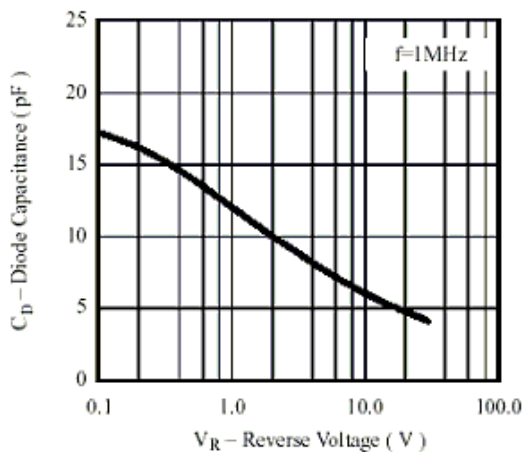


Figure 5. Max. Reverse Power Dissipation vs. Junction Temperature

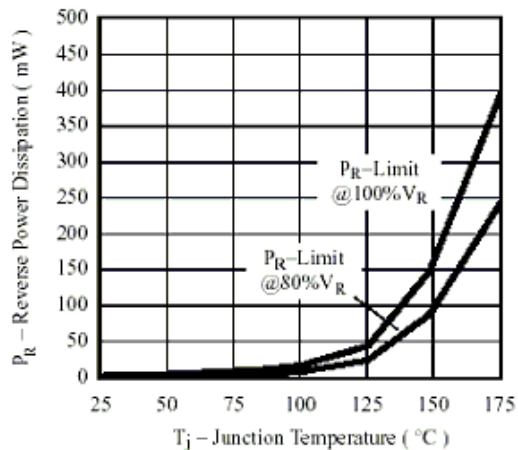


Figure 6. Max. Reverse Current vs. Junction Temperature

