

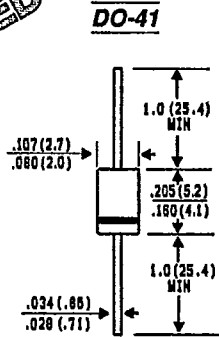
BY206GP THRU BY207GP

MINIATURE GLASS PASSIVATED JUNCTION FAST SWITCHING RECTIFIER

Voltage - 350 to 600 Volts Current - 0.4 Amperes

FEATURES

PATENTED*



Dimensions in inches and (millimeters)

- ◆ High temperature metallurgically bonded constructed rectifiers
- ◆ For use in high frequency rectifier circuits
- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Fast switching for high efficiency
- ◆ Glass passivated cavity-free junction in DO-41 package
- ◆ 0.4 Ampere operation at $T_A = 55^\circ\text{C}$ with no thermal runaway
- ◆ Typical I_R less than $1 \mu\text{A}$
- ◆ Capable of meeting environmental standards of MIL-S-19500
- ◆ High temperature soldering guaranteed $350^\circ\text{C}/10$ seconds/.375", (9.5mm) lead length at 5 lbs., (2.3kg) tension

* Glass-plastic encapsulation technique is covered by Patent No. 3,996,602 of 1976; brazed-lead assembly to Patent No. 3,930,306 of 1976 and glass composition by Patent No. 3,752,701 of 1973

MECHANICAL DATA

Case: Molded plastic over glass
Terminals: Axial leads, solderable per MIL-STD-202, Method 208
Polarity: Color band denotes cathode
Mounting Position: Any
Weight: 0.012 ounce, .3 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load. For capacitive load, derate current by 20%.

	SYMBOLS	BY206GP	BY207GP	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	350	600	Volts
Maximum RMS Voltage	V_{RMS}	210	350	Volts
Maximum DC Blocking Voltage	V_{DC}	300	500	Volts
Maximum Average Forward Rectified Current .375", (9.5mm) Lead Lengths at $T_A = 55^\circ\text{C}$	$I_{(AV)}$	0.4		Amps
Peak Forward Surge Current 10ms single half sine-wave superimposed on rated load at $T_A = 25^\circ\text{C}$	I_{FSM}	15		Amps
Maximum Instantaneous Forward Voltage at 2.0A $T_J = 150^\circ\text{C}$	V_F	1.5		Volts
Maximum Full Load Reverse Current $T_A = 55^\circ\text{C}$ Full Cycle Average at $T_J = 125^\circ\text{C}$	I_R	2.0 200	2.0 125	μA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	1.0		μs
Typical Junction Capacitance (Note 2)	C_J	15.0		pf
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	45.0		$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175		$^\circ\text{C}$

NOTES:

1. Reverse Recovery Test Conditions : $I_F = 0.4\text{A}$, $V_R = 50\text{V}$ $di/dt = 0.4/\mu\text{s}$.
2. Measured at 1 MHz and applied reverse voltage of 4.0 V_{DC}.
3. Thermal Resistance from Junction to Ambient at .375" (9.5mm) Lead Lengths, P.C. Board Mounted.

RATINGS AND CHARACTERISTIC CURVES BY206GP THRU BY207GP

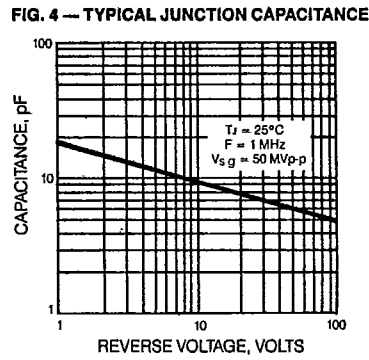
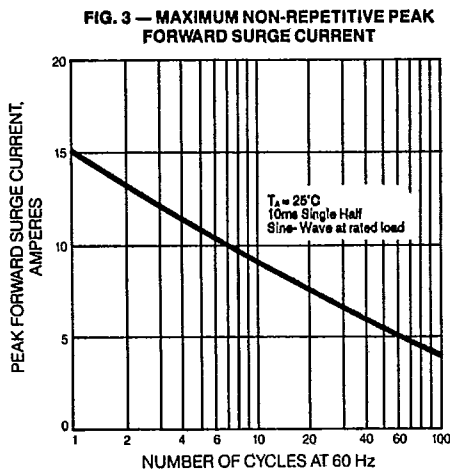
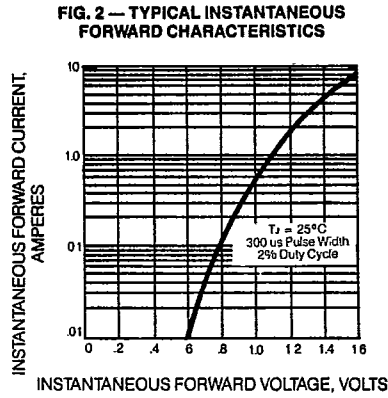
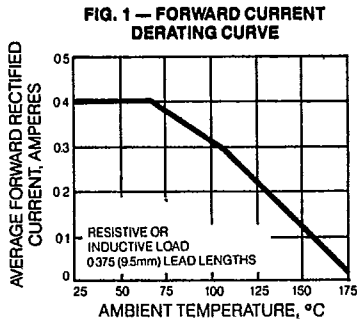


FIG. 5 — REVERSE RECOVERY TIME CHARACTERISTIC

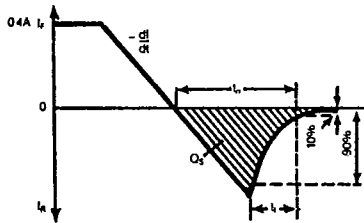


FIG. 6 — SUPERRECTIFIER

