TAYCHIPST

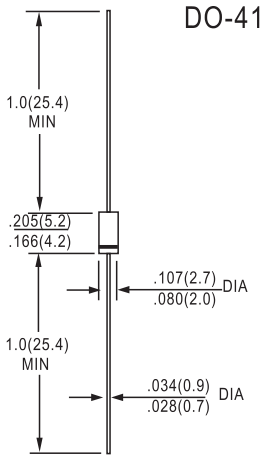
GLASS PASSIVATED FAST RECOVERY RECTIFIER

ERB05GG

400V 0.5A

FEATURES

- Molded case feature for auto insertion
- High current capability
- Low leakage current
- Fast switching capability
- High temperature soldering guaranteed
- 250℃ /10sec/0.375" lead length at 5 lbs tension
- Glass Passivated chip



Dimensions in inches and (millimeters)

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	ERB05GG	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	400	V
Maximum RMS Voltage	Vrms	280	V
Maximum DC blocking Voltage	Vdc	400	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55℃	If(av)	0.5	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	10.0	A
Maximum Forward Voltage at rated Forward Current and 25℃	Vf	1.2	V
Maximum full load reverse current full cycle average at 55℃ Ambient	Ir(av)	100.0	μA
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =150℃	Ir	5.0 100.0	μA μA
Maximum Reverse Recovery Time (Note 1)	Trr	150	nS
Typical Junction Capacitance (Note 2)	Cj	15.0	pF
Typical Thermal Resistance (Note 3)	Rth(ja)	55.0	℃ /W
Storage and Operating Junction Temperature	Tstg, Tj	-55 to +150	℃

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 ERB05GG

FIG. 1 - FORWARD CURRENT DERATING CURVE

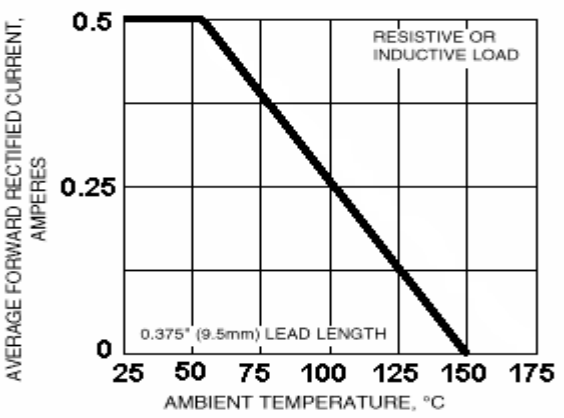


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

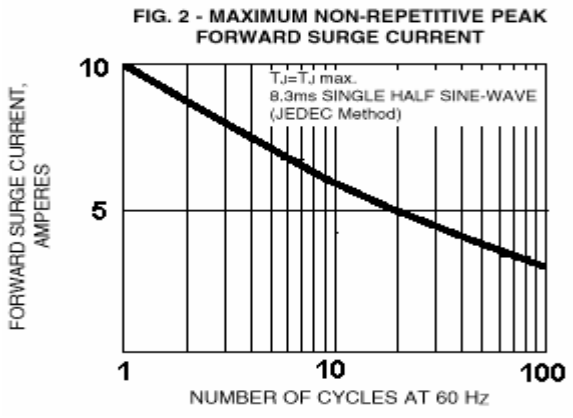


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

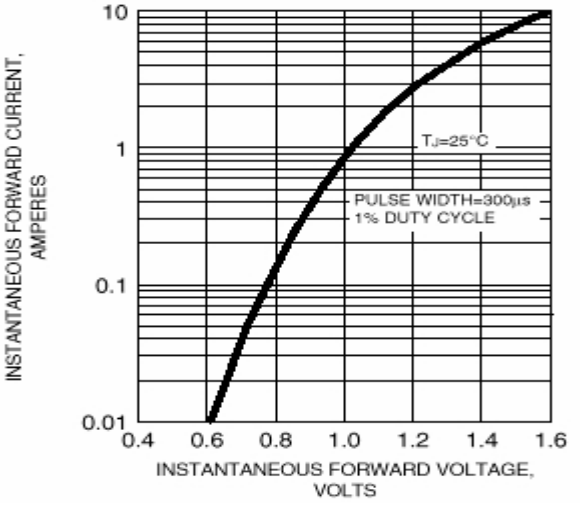


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

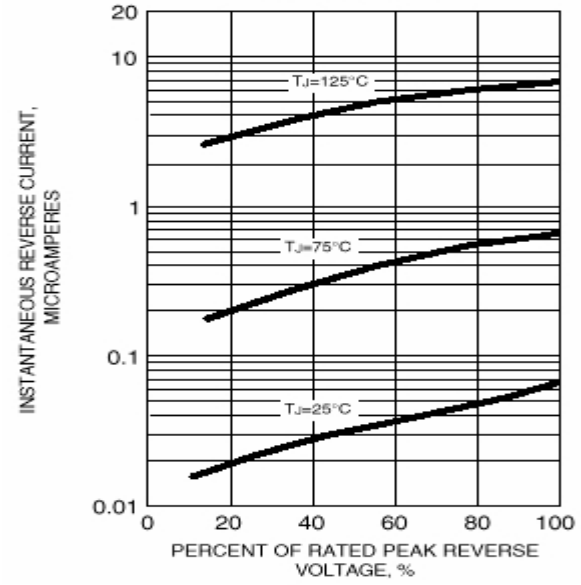


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

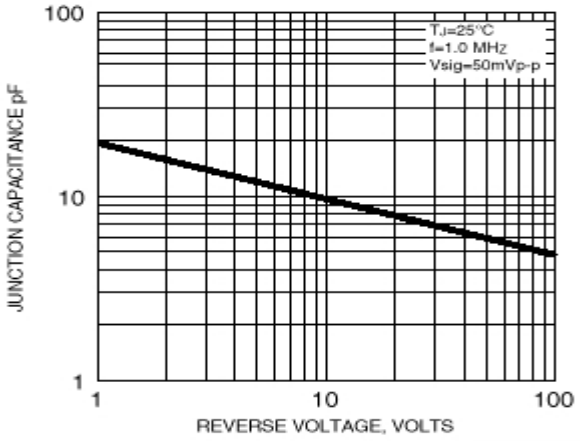


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE