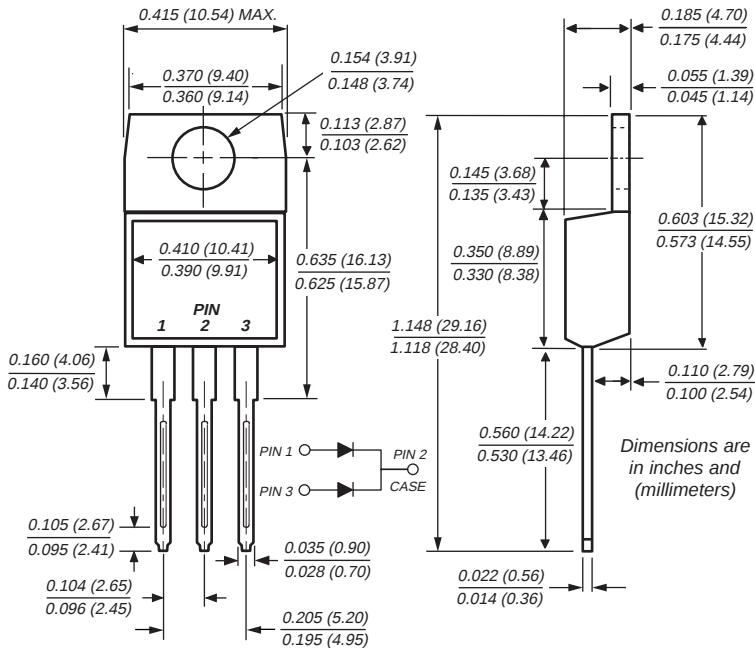


Dual Ultrafast Plastic Rectifier

Reverse Voltage 50 to 200V
Forward Current 16.0A

TO-220AB



Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive centertap
- Glass passivated chip junctions
- Low power loss
- High surge current capability
- Superfast recovery times for high efficiency
- High temperature soldering guaranteed: 250°C, 0.16" (4.06mm) from case for 10 seconds

Mechanical Data

Case: JEDEC TO-220AB molded plastic body over passivated chips**Terminals:** Plated leads solderable per MIL-STD-750, Method 2026**Polarity:** As marked**Mounting Position:** Any**Mounting Torque:** 10 in-lbs maximum**Weight:** 0.08 oz., 2.24 g

Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	GI2401	GI2402	GI2403	GI2404	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	150	200	V
Maximum RMS voltage	V _{RMS}	35	70	105	140	V
Maximum DC blocking voltage	V _{DC}	50	100	150	200	V
Maximum average forward rectified current at T _C = 100°C	I _{F(AV)}	16				A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at T _C =125°C	I _{FSM}	125				A
Typical thermal resistance (Note 1)	R _{θJA} R _{θJC}	16 2.2				°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +150				°C

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	GI2401	GI2402	GI2403	GI2404	Unit
Maximum instantaneous forward voltage per leg at I _F = 4A, T _J = 25°C I _F = 8A, T _J = 25°C I _F = 4A, T _J = 100°C I _F = 8A, T _J = 100°C	V _F	0.900 0.975 0.800 0.895				V
Maximum DC reverse current at rated DC blocking voltage per leg T _C = 25°C T _C = 100°C	I _R	50 150			5.0 500	μA
Maximum reverse recovery time per leg at I _F = 0.5A, I _R = 1.0A, I _{rr} = 0.25A	t _{rr}	35				ns
Typical junction capacitance per leg at 4V, 1 MHz	C _J	85				pF

Notes: (1) Thermal resistance from junction to ambient and from junction to case per leg mounted on heatsink

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig. 1 – Maximum Forward Current Derating Curve

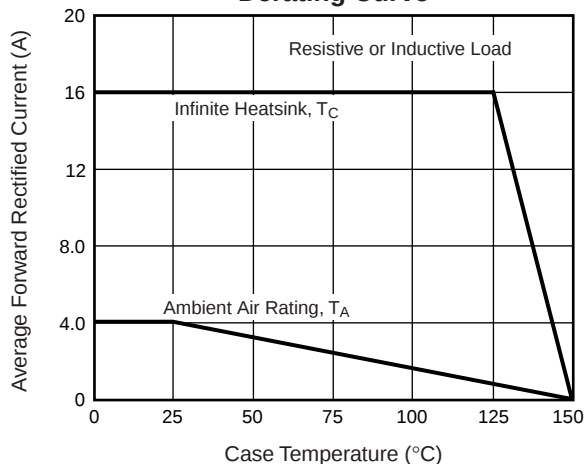


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg

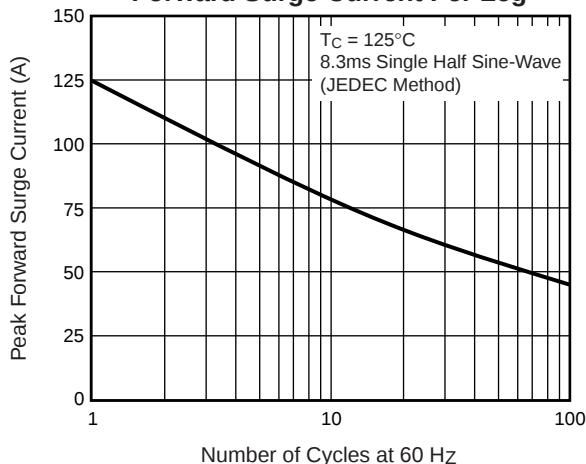


Fig. 3 – Typical Instantaneous Forward Characteristics Per Leg

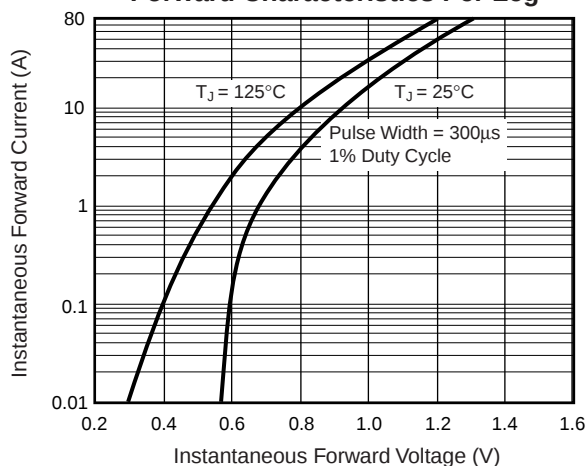


Fig. 4 – Typical Reverse Leakage Characteristics Per Leg

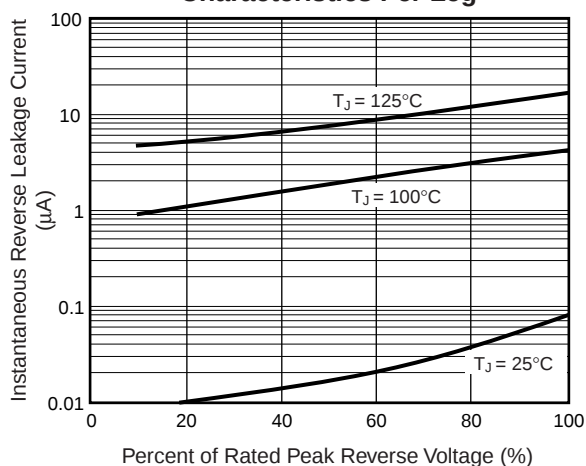


Fig. 5 – Typical Junction Capacitance Per Leg

