

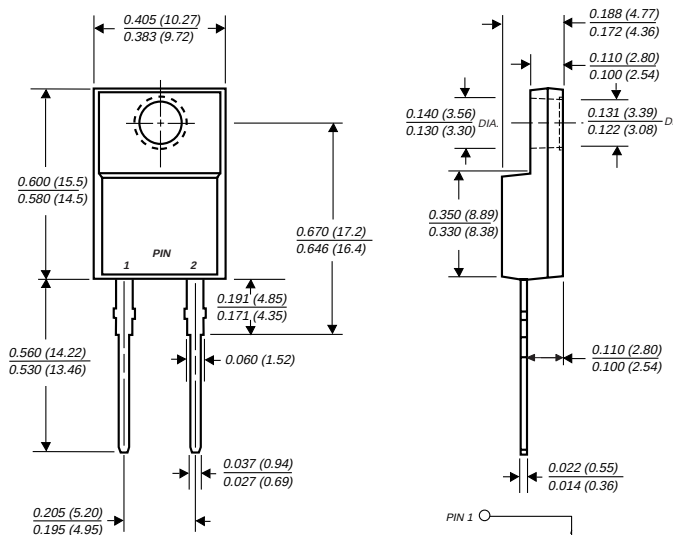
GIF1401 THRU GIF1404

FAST EFFICIENT PLASTIC RECTIFIER

Reverse Voltage - 50 to 200 Volts

Forward Current - 8.0 Amperes

ITO-220AC



FEATURES

- ♦ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ♦ Glass passivated chip junction
- ♦ Low power loss
- ♦ Low leakage current
- ♦ High surge capability
- ♦ Superfast recovery time for high efficiency
- ♦ High temperature soldering guaranteed: 250°C, 0.25" (6.35mm) from case for 10 seconds



MECHANICAL DATA

Case: JEDEC ITO-220AC molded plastic body over passivated chip

Terminals: Lead solderable per MIL-STD-750, Method 2026

Polarity: As marked

Mounting Position: Any

Weight: 0.064 ounce, 1.81 grams

Mounting Torque: 5 in. - lbs. max.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	GIF1401	GIF1402	GIF1403	GIF1404	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	150	200	Volts
Maximum RMS voltage	V_{RMS}	35	70	105	140	Volts
Maximum DC blocking voltage	V_{DC}	50	100	150	200	Volts
Maximum average forward rectified current at $T_C=125^\circ\text{C}$	$I_{(AV)}$	8.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at $T_C=125^\circ\text{C}$	I_{FSM}	125.0				Amps
Maximum instantaneous forward voltage at: $I_F=4\text{A}$, $T_J=100^\circ\text{C}$ $I_F=8\text{A}$, $T_J=100^\circ\text{C}$ $I_F=4\text{A}$, $T_J=25^\circ\text{C}$ $I_F=8\text{A}$, $T_J=25^\circ\text{C}$	V_F	0.800 0.895 0.900 0.975				Volts
Maximum DC reverse current at rated DC blocking voltage $T_C=25^\circ\text{C}$ $T_C=100^\circ\text{C}$	I_R	5.0 150.0				μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	35.0				ns
Typical junction capacitance (NOTE 2)	C_J	85.0				pF
Typical thermal resistance (NOTE 3)	$R_{\theta JC}$	5.0				$^\circ\text{C/W}$
Operating and storage temperature range	T_J, T_{STG}	-65 to +150				$^\circ\text{C}$

NOTES:

- (1) Reverse recovery test conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (3) Thermal resistance from junction to case mounted on heatsink

RATINGS AND CHARACTERISTIC CURVES GIF1401 THRU GIF1404

