

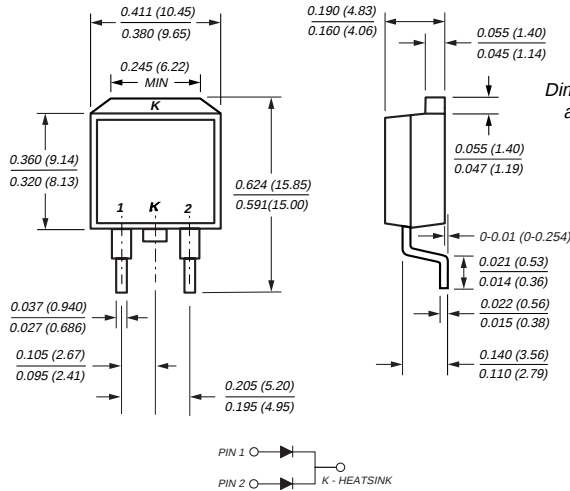
Dual Ultrafast Plastic Rectifier

Reverse Voltage 50 to 200V

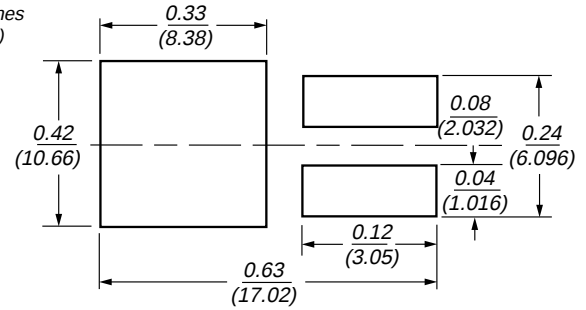
Forward Current 16.0A



TO-263AB



Mounting Pad Layout



Mechanical Data

Case: JEDEC TO-263AB molded plastic body

Terminals: Plated lead solderable per MIL-STD-750, Method 2026

Polarity: As marked **Mounting Position:** Any

Weight: 0.05 ounce, 1.35 grams

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 in accordance with CECC 802 / Reflow guaranteed

Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	GIB2401	GIB2402	GIB2403	GIB2404	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 $T_C = 125^\circ\text{C}$	$I_{F(AV)}$	16				A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at $T_C=100^\circ\text{C}$	I_{FSM}	125				A
Typical thermal resistance (Note 1)	$R_{\theta JC}$	1.2				$^\circ\text{C/W}$
Operating storage and temperature range	T_J, T_{STG}	-65 to +150				$^\circ\text{C}$

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	GIB2401	GIB2402	GIB2403	GIB2404	Unit
Maximum instantaneous forward voltage per leg at $I_F = 4\text{A}, T_J = 25^\circ\text{C}$ $I_F = 8\text{A}, T_J = 25^\circ\text{C}$ $I_F = 4\text{A}, T_J = 100^\circ\text{C}$ $I_F = 8\text{A}, T_J = 100^\circ\text{C}$	V_F	0.900 0.975 0.800 0.895				V
Maximum DC reverse current per leg at rated DC blocking voltage $T_C = 25^\circ\text{C}$ $T_C = 100^\circ\text{C}$	I_R	50 150				μA
Maximum reverse recovery time per leg at $I_F = 0.5\text{A}, I_R = 1.0\text{A}, I_{rr} = 0.25\text{A}$	t_{rr}	35				ns
Typical junction capacitance per leg at 4V, 1MHz	C_J	85				pF

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

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

Fig. 1 – Maximum Forward Current Derating Curve

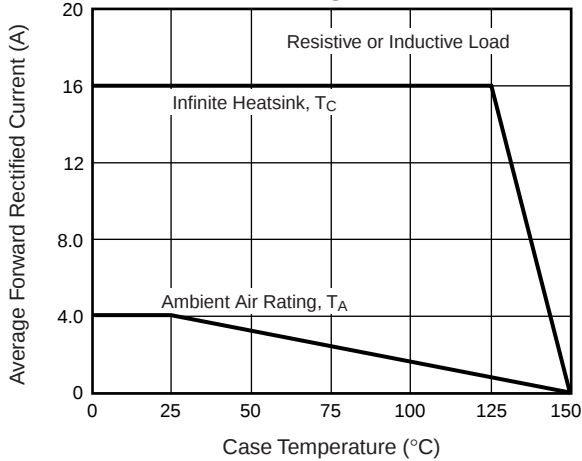


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg

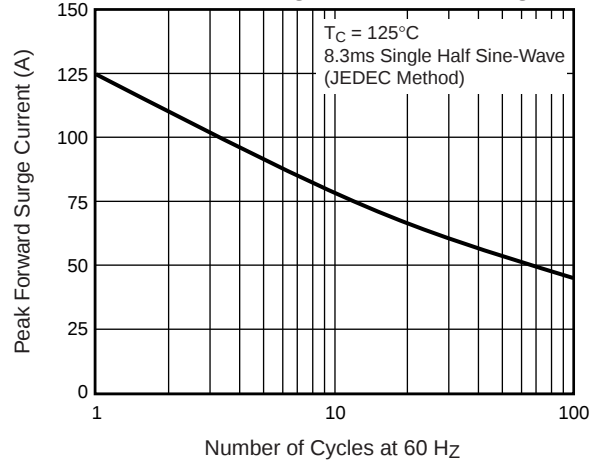


Fig. 3 – Typical Instantaneous Forward Characteristics Per Leg

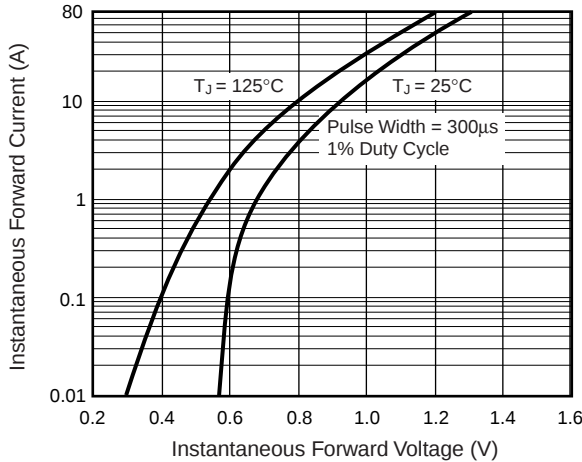


Fig. 4 – Typical Reverse Leakage Characteristics Per Leg

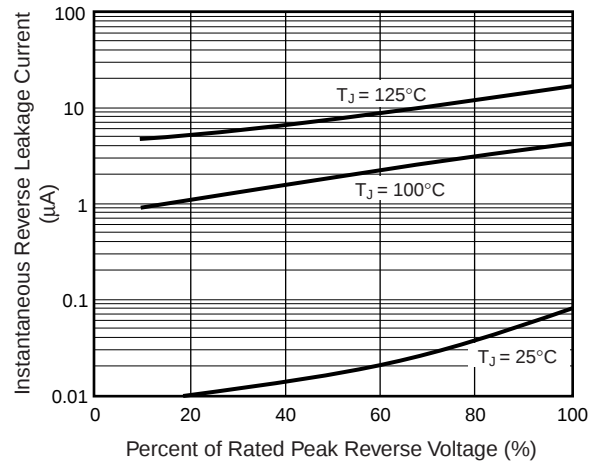


Fig. 5 – Typical Junction Capacitance Per Leg

