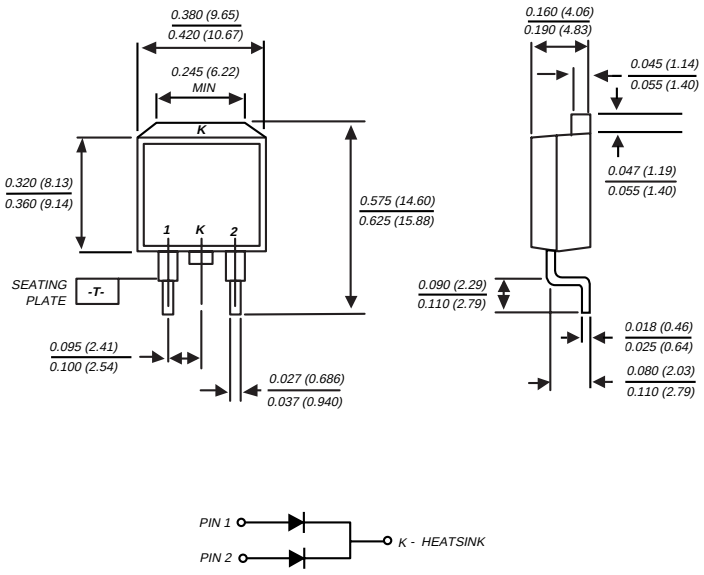
FEPB16AT THRU FEPB16JT

FAST EFFICIENT PLASTIC RECTIFIER

***Reverse Voltage** - 50 to 600 Volts* ***Forward Current** - 16.0 Amperes*

TO-263AB



Dimensions are in inches and (millimeters)

FEATURES



- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive centertap
- Glass passivated chip junctions
- Low power loss
- Low forward voltage, high current capability
- High surge current capability
- Superfast recovery times for high efficiency
- High temperature soldering in accordance with CECC 802 / Reflow guaranteed

MECHANICAL DATA

Case: JEDEC TO-263AB molded plastic body
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: As marked
Mounting Position: Any
Weight: 0.08 ounce, 2.24 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	FEPB 16AT	FEPB 16BT	FEPB 16CT	FEPB 16DT	FEPB 16FT	FEPB 16GT	FEPB 16HT	FEPB 16JT	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	150	200	300	400	500	600	Volts
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	350	420	Volts
Maximum DC blocking voltage	V_{DC}	50	100	150	200	300	400	500	600	Volts
Maximum average forward rectified current at T_C=100°C	$I_{(AV)}$	16.0								Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at T_C=100°C per leg	I_{FSM}	200.0								Amps
Maximum instantaneous forward voltage per leg at 8.0A	V_F	0.95				1.3		1.5		Volts
Maximum DC reverse current at rated DC blocking voltage per leg T_C=25°C T_C=100°C	I_R	10.0 500.0								µA
Maximum reverse recovery time (NOTE 1) per leg	t_{rr}	35.0				50.0				ns
Typical junction capacitance per leg (NOTE 2)	C_J	85.0						60.0		pF
Typical thermal resistance (NOTE 3)	$R_{\Theta JC}$	2.2								°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150								°C

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

GENERAL SEMICONDUCTOR®

RATINGS AND CHARACTERISTICS CURVES FEPB16AT THRU FEPB16JT

FIG. 1 - FORWARD CURRENT DERATING CURVE

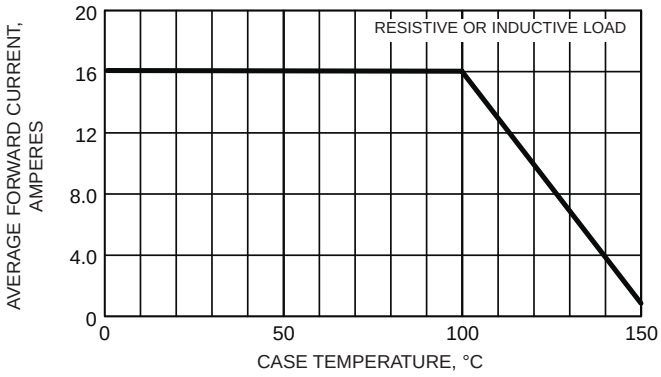


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

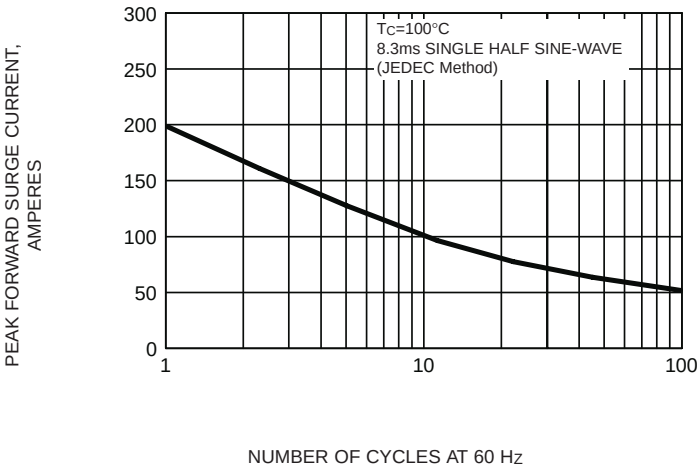


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

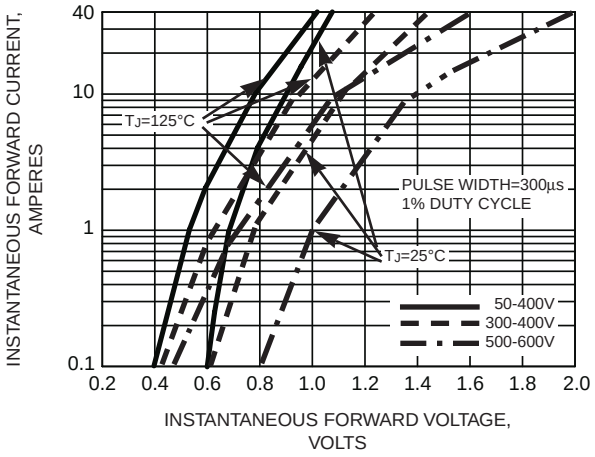


FIG. 4 -TYPICAL REVERSE CHARACTERISTICS PER LEG

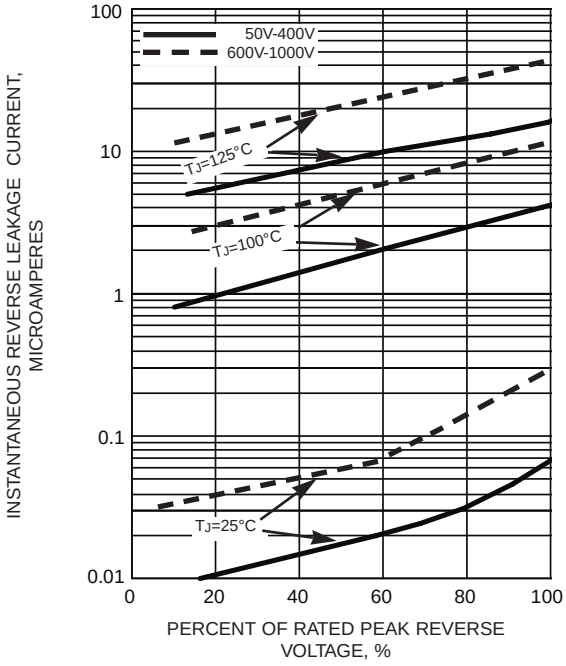
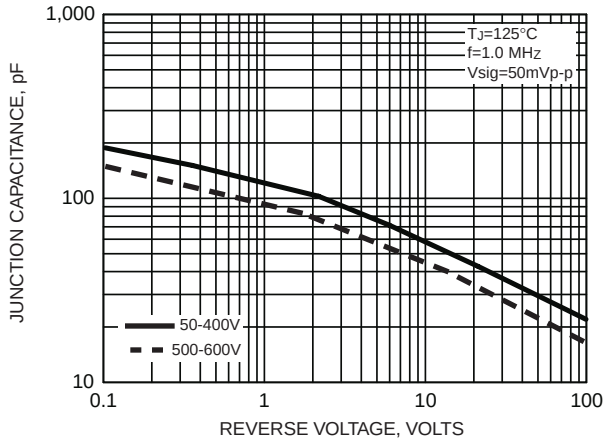


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG



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