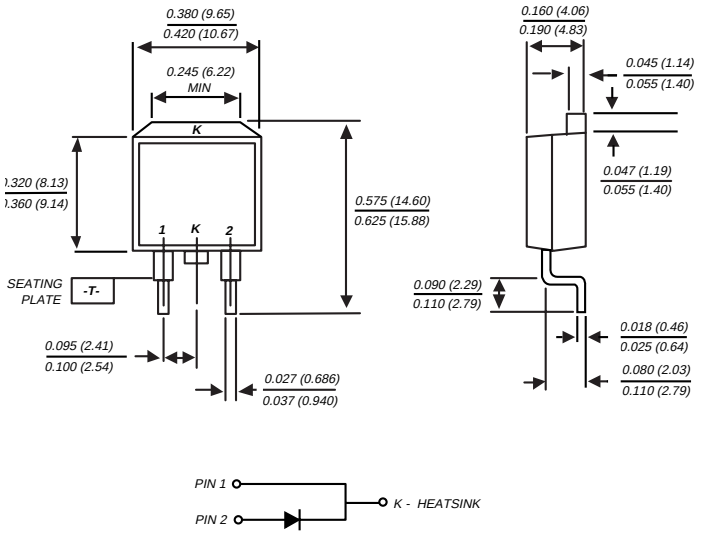
FESB16AT THRU FESB16JT

FAST EFFICIENT PLASTIC RECTIFIER

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

TO-263AB



Dimensions in inches and (millimeters)

FEATURES

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

MECHANICAL DATA

Case: JEDEC TO-263AB molded plastic body over passivated chips
Terminals: Plated lead 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	*FESB 16AT*	*FESB 16BT*	*FESB 16CT*	*FESB 16DT*	*FESB 16FT*	*FESB 16GT*	*FESB 16HT*	*FESB 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	I_{FSM}	250.0								Amps
Maximum instantaneous forward voltage at 16A	V_F	0.975				1.3		1.5		Volts
Maximum DC reverse current at rated DC blocking voltage T_C=25°C / T_C=100°C	I_R	10.0 / 500.0								µA
Maximum reverse recovery time (NOTE1)	t_{rr}	35.0				50.0				ns
Typical junction capacitance (NOTE 2)	C_J	175.0						145.0		pF
Typical thermal resistance (NOTE 3)	$R_{\Theta JC}$	1.2								°C/W
Operating and storage temperature range	T_J, T_{STG}	-65 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 MH_Z and applied reverse voltage of 4.0 Volts
(3) Thermal resistance from junction to case

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RATINGS AND CHARACTERISTICS CURVES FESB16AT THRU FESB16JT

FIG. 1 - FORWARD CURRENT DERATING CURVE

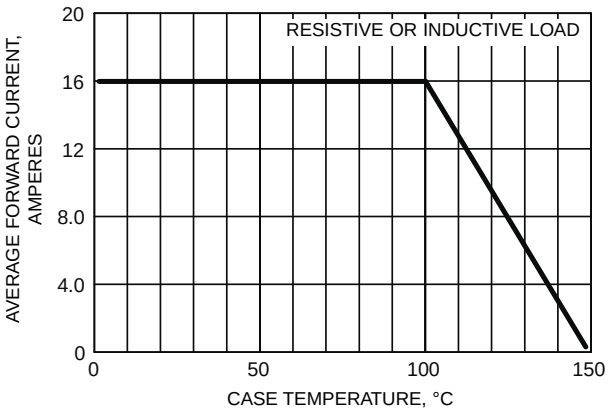


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

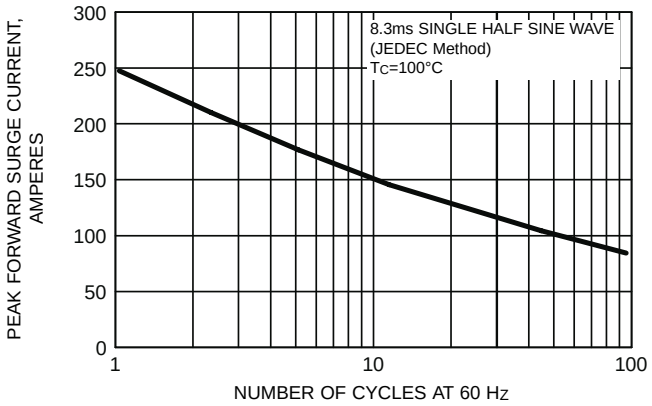


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

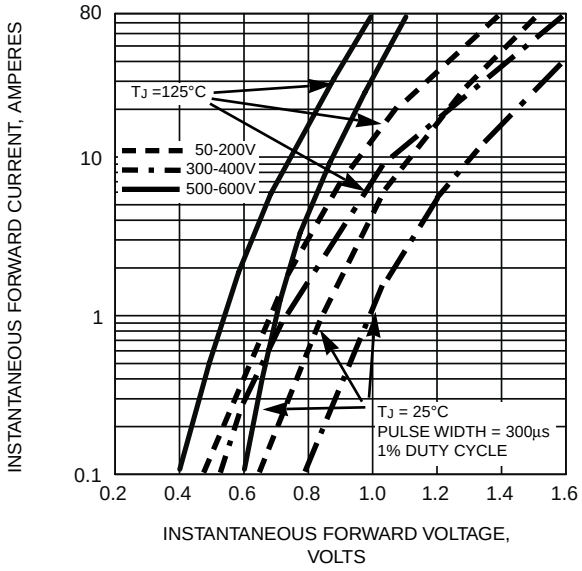


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

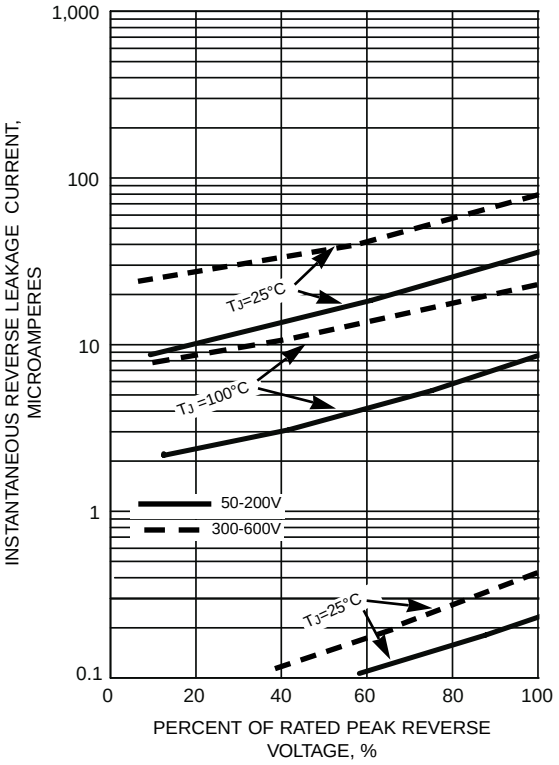
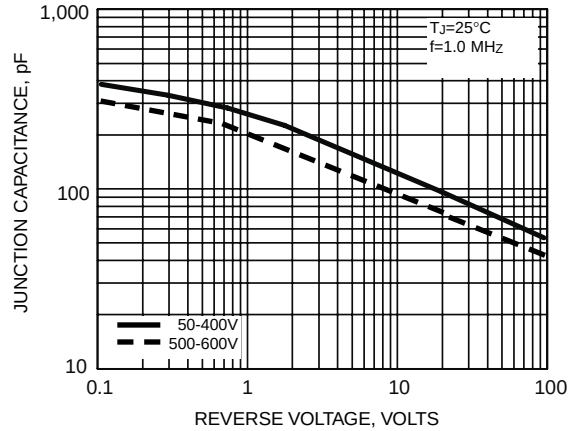


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



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