



ELECTRICAL CHARACTERISTICS (T _C = 25 °C unless otherwise noted)											
PARAMETER	TEST CONDITIONS	SYMBOL	FES 16AT	FES 16BT	FES 16CT	FES 16DT	FES 16FT	FES 16GT	FES 16HT	FES 16JT	UNIT
Maximum instantaneous forward voltage	16 A	V _F ⁽¹⁾	0.975				1.30		1.50		V
Maximum DC reverse current at rated DC blocking voltage	T _C = 25 °C	I _R	10								μA
	T _C = 100 °C		500								
Maximum reverse recovery time	I _F = 0.5 A, I _R = 1.0 A, I _{rr} = 0.25 A	t _{rr}	35				50				ns
Typical junction capacitance	4.0 V, 1 MHz	C _J	175						145		pF

Note

(1) Pulse test: 300 μs pulse width, 1 % duty cycle

THERMAL CHARACTERISTICS (T _C = 25 °C unless otherwise noted)					
PARAMETER	SYMBOL	FES	FESF	FESB	UNIT
Typical thermal resistance, junction to case	R _{θJC}	1.2	1.7	1.2	°C/W

ORDERING INFORMATION (Example)					
PACKAGE	PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
TO-220AC	FES16JT-E3/45	1.78	45	50/tube	Tube
ITO-220AC	FESF16JT-E3/45	1.80	45	50/tube	Tube
TO-263AB	FESB16JT-E3/45	1.33	45	50/tube	Tube
TO-263AB	FESB16JT-E3/81	1.33	81	800/reel	Tape and reel
ITO-220AC	FESF16JT _{HE3} _A/P ⁽¹⁾	1.80	P	50/tube	Tube
TO-263AB	FESB16JT _{HE3} _A/P ⁽¹⁾	1.33	P	50/tube	Tube
TO-263AB	FESB16JT _{HE3} _A/I ⁽¹⁾	1.33	I	800/reel	Tape and reel

Note

(1) AEC-Q101 qualified, available in ITO-220AC and TO-263AB package



RATINGS AND CHARACTERISTICS CURVES ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

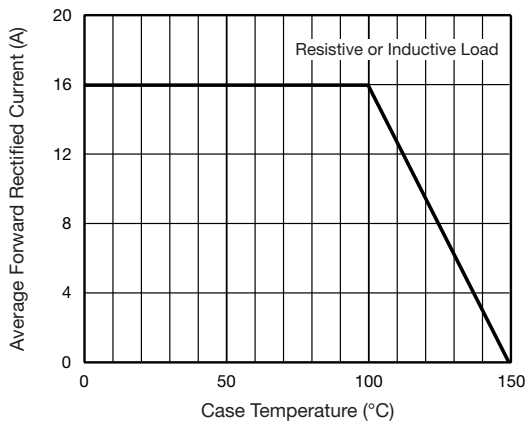


Fig. 1 - Maximum Forward Current Derating Curve

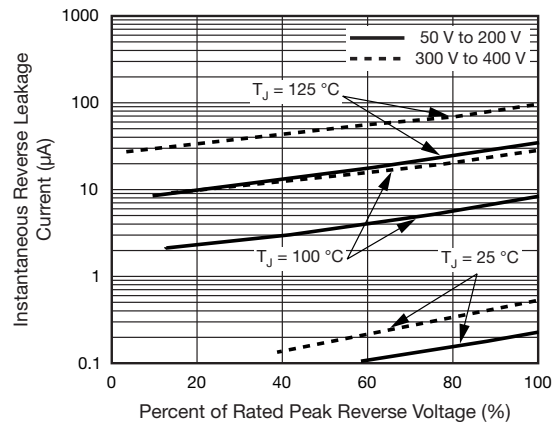


Fig. 4 - Typical Reverse Leakage Characteristics

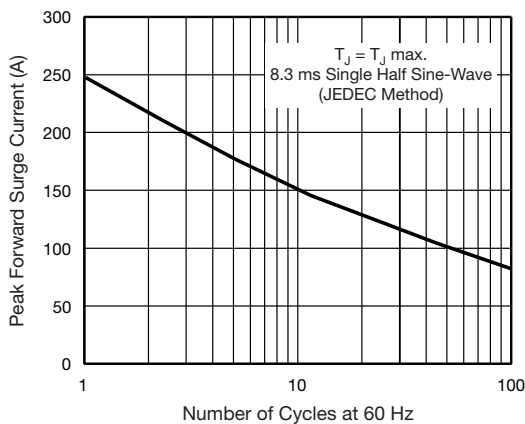


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

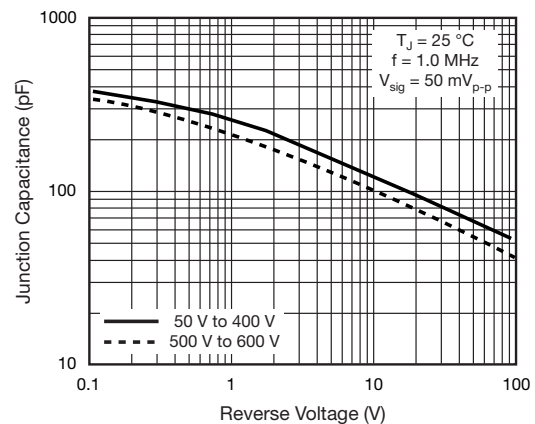


Fig. 5 - Typical Junction Capacitance

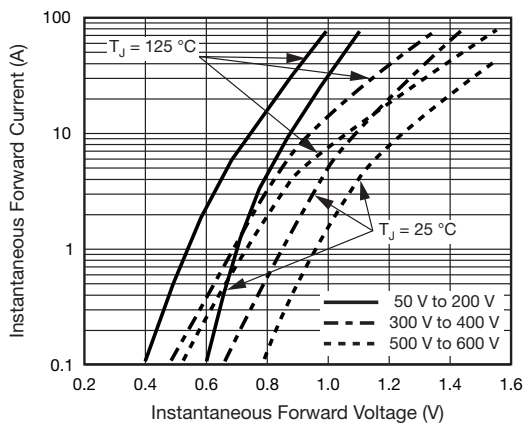
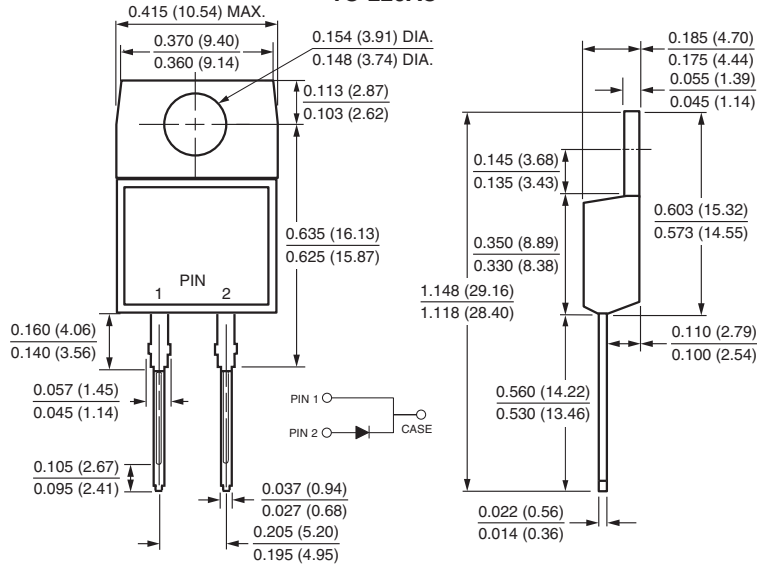


Fig. 3 - Typical Instantaneous Forward Characteristics

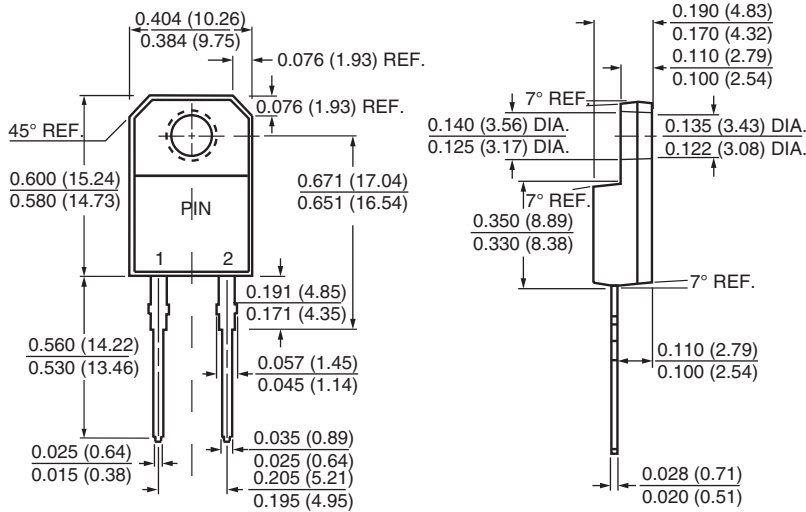


PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

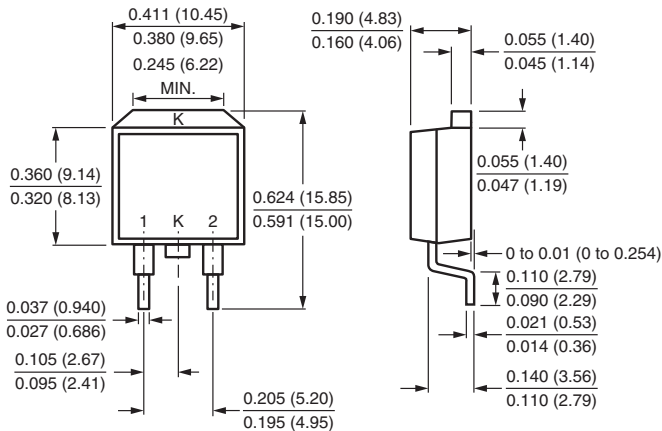
TO-220AC



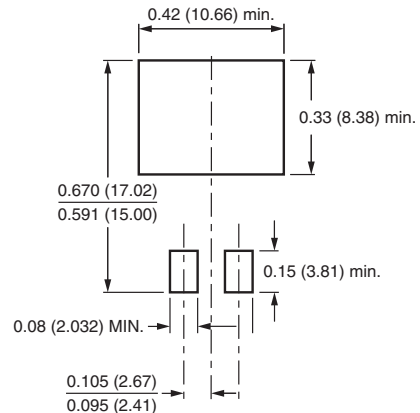
ITO-220AC



D²PAK (TO-263AB)



Mounting Pad Layout





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