



ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)											
PARAMETER	TEST CONDITIONS		SYMBOL	NS8AT	NS8BT	NS8DT	NS8GT	NS8JT	NS8KT	NS8MT	UNIT
Maximum instantaneous forward voltage	8.0 A	T _J = 25 °C	V _F ⁽¹⁾	1.1							V
Maximum DC reverse current at rated DC blocking voltage		T _J = 25 °C	I _R	10							μA
		T _J = 100 °C		100							
Typical junction capacitance	4.0 V, 1 MHz		C _J	55							pF

Note

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

THERMAL CHARACTERISTICS ($T_A = 25\text{ }^{\circ}\text{C}$ unless otherwise noted)					
PARAMETER	SYMBOL	NSXT	NSFXT	NSBXT	UNIT
Typical thermal resistance from junction to case	$R_{\theta JC}$	3.0	5.0	3.0	$^{\circ}\text{C/W}$

ORDERING INFORMATION (Example)					
PACKAGE	PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
TO-220AC	NS8JT-E3/45	1.80	45	50/tube	Tube
ITO-220AC	NSF8JT-E3/45	1.95	45	50/tube	Tube
TO-263AB	NSB8JT-E3/45	1.77	45	50/tube	Tube
TO-263AB	NSB8JT-E3/81	1.77	81	800/reel	Tape and reel
TO-220AC	NS8JT ^{THE3} /45 ⁽¹⁾	1.80	45	50/tube	Tube
ITO-220AC	NSF8JT ^{THE3} /45 ⁽¹⁾	1.95	45	50/tube	Tube
TO-263AB	NSB8JT ^{THE3} /45 ⁽¹⁾	1.77	45	50/tube	Tube
TO-263AB	NSB8JT ^{THE3} /81 ⁽¹⁾	1.77	81	800/reel	Tape and reel

Note

⁽¹⁾ AEC-Q101 qualified



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

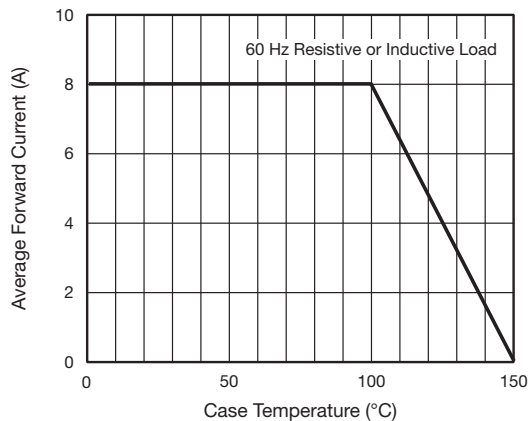


Fig. 1 - Forward Current Derating Curve

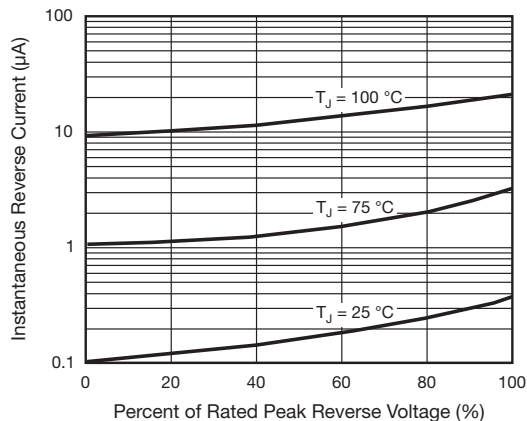


Fig. 4 - Typical Reverse Characteristics

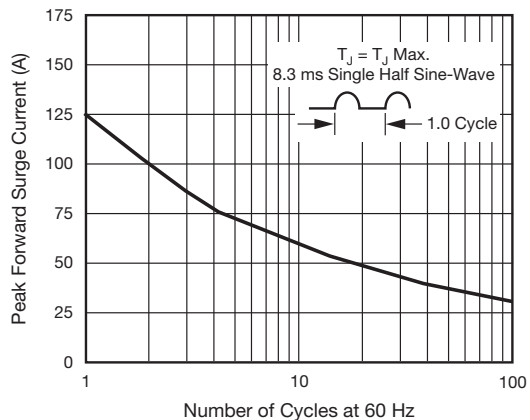


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

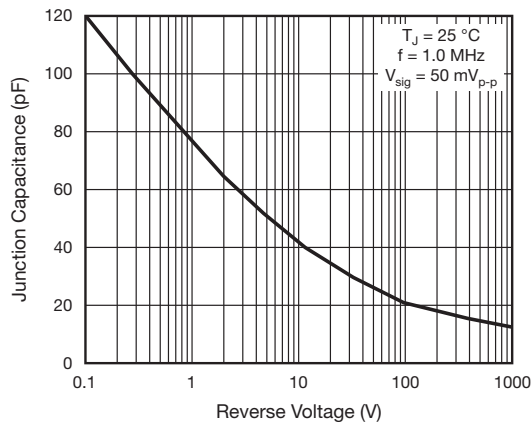


Fig. 5 - Typical Junction Capacitance Per Leg

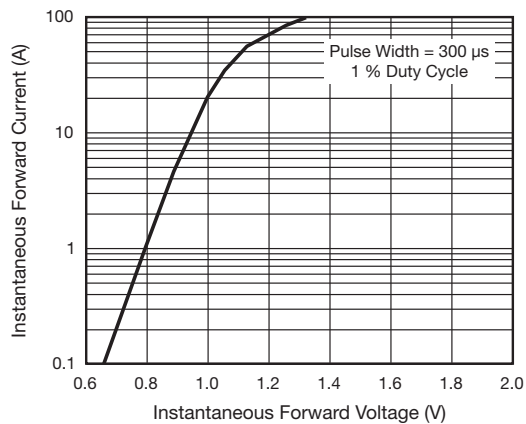
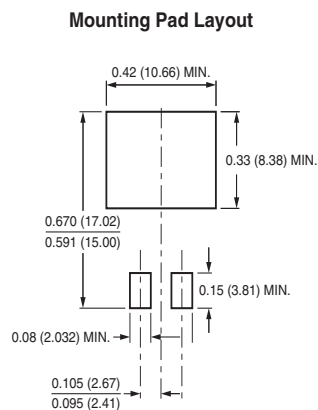
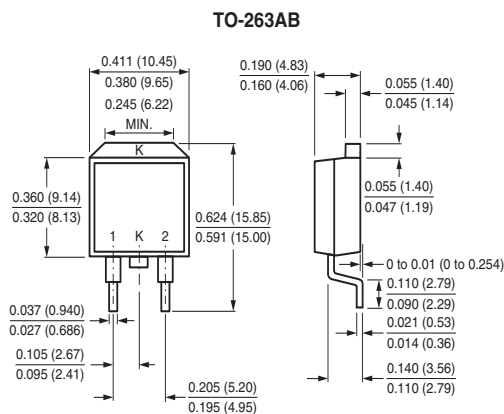
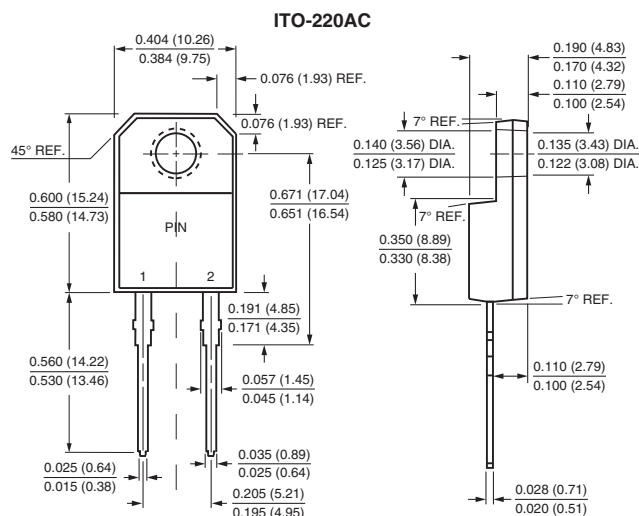
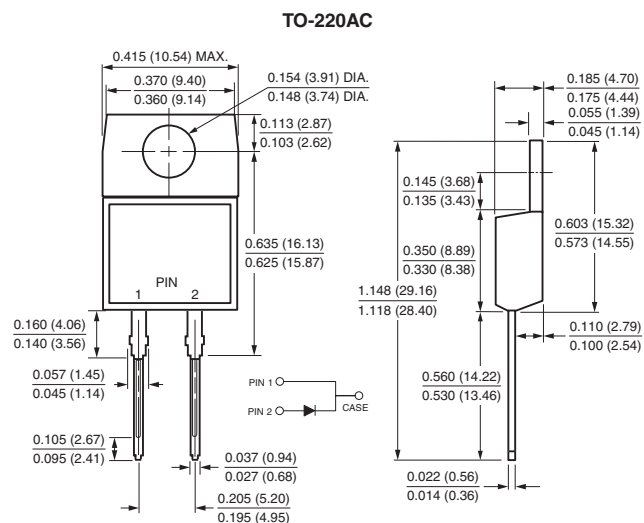


Fig. 3 - Typical Instantaneous Forward Characteristics

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)



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