



ELECTRICAL CHARACTERISTICS ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)											
PARAMETER	TEST CONDITIONS		SYMBOL	NS8AT	NS8BT	NS8DT	NS8GT	NS8JT	NS8KT	NS8MT	UNIT
Maximum instantaneous forward voltage	8.0 A	$T_J = 25\text{ }^\circ\text{C}$	$V_F^{(1)}$				1.1				V
Maximum DC reverse current at rated DC blocking voltage		$T_J = 25\text{ }^\circ\text{C}$	I_R				10				μA
		$T_J = 100\text{ }^\circ\text{C}$					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
ITO-220AC	NSF8JT _{THE3} _B/P ⁽¹⁾	1.95	P	50/tube	Tube
TO-263AB	NSB8JT _{THE3} _B/P ⁽¹⁾	1.77	P	50/tube	Tube
TO-263AB	NSB8JT _{THE3} _B/I ⁽¹⁾	1.77	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)

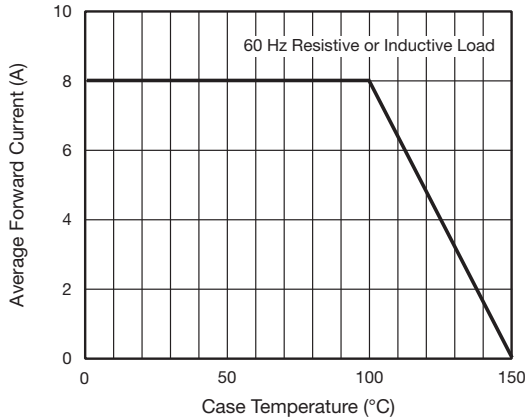


Fig. 1 - Forward Current Derating Curve

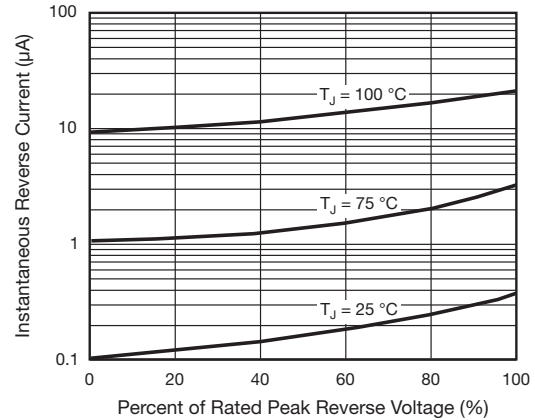


Fig. 4 - Typical Reverse Characteristics

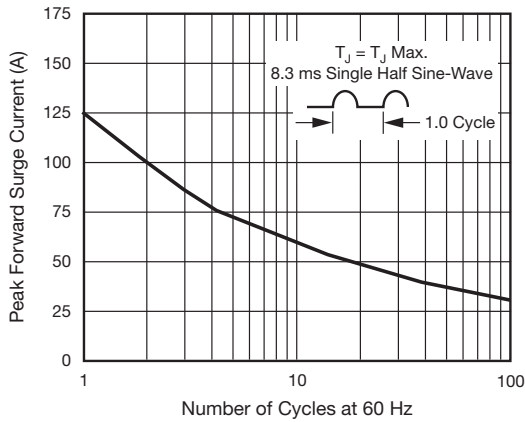


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

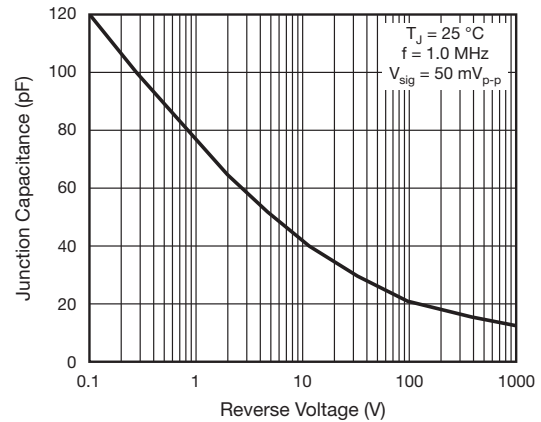


Fig. 5 - Typical Junction Capacitance Per Leg

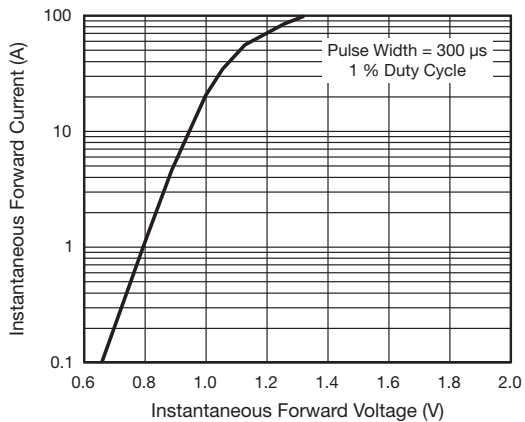
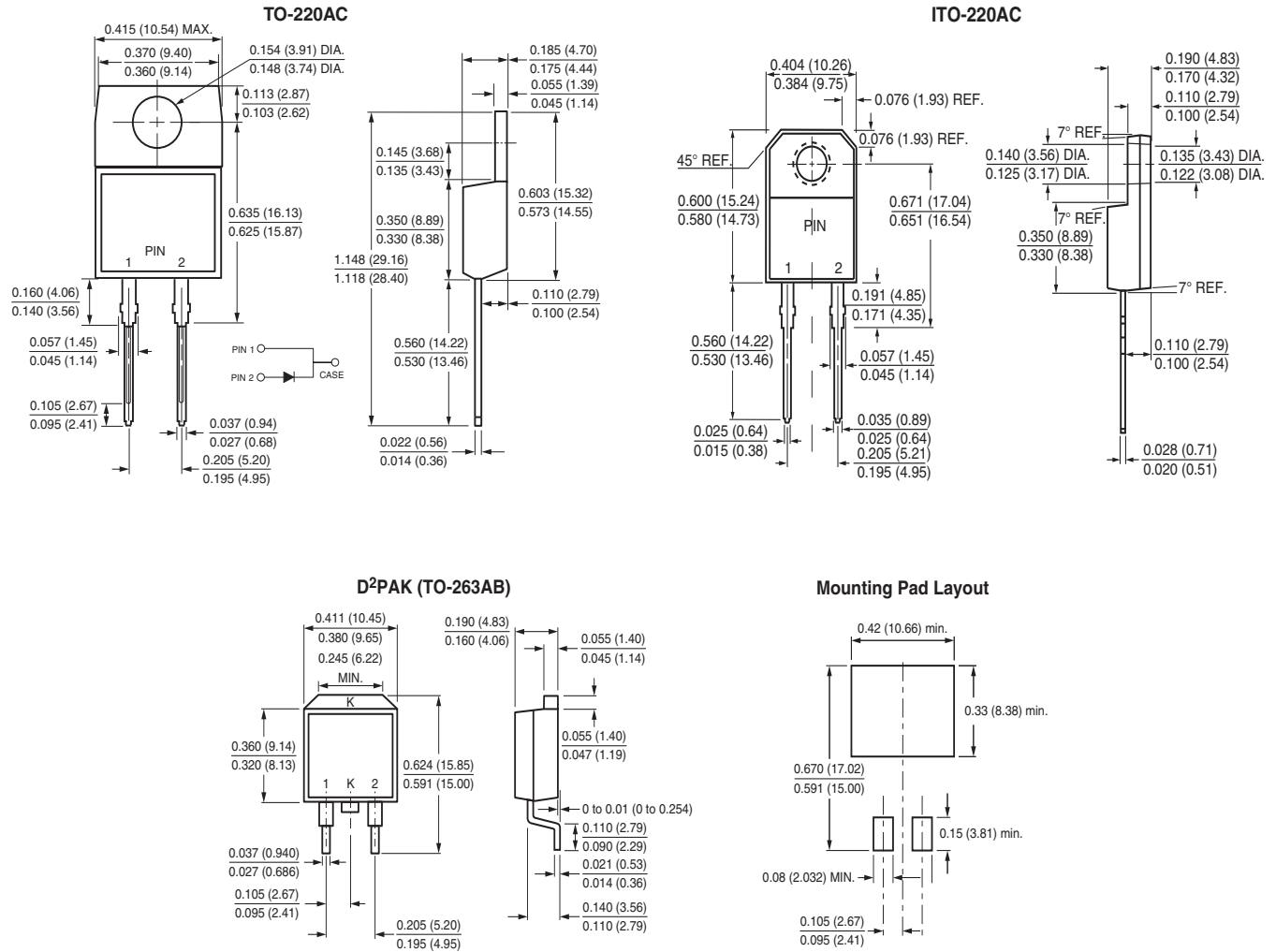


Fig. 3 - Typical Instantaneous Forward Characteristics



PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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