



ELECTRICAL CHARACTERISTICS (T <sub>A</sub> = 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 <sub>J</sub> = 25 °C	V <sub>F</sub> <sup>(1)</sup>	1.1							V
Maximum DC reverse current at rated DC blocking voltage		T <sub>J</sub> = 25 °C	I <sub>R</sub>	10							μA
		T <sub>J</sub> = 100 °C		100							
Typical junction capacitance	4.0 V, 1 MHz		C <sub>J</sub>	55							pF

**Note**(1) Pulse test: 300  $\mu\text{s}$  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-E3_B/P <sup>(1)</sup>	1.95	P	50/tube	Tube
TO-263AB	NSB8JT-E3_B/P <sup>(1)</sup>	1.77	P	50/tube	Tube
TO-263AB	NSB8JT-E3_B/I <sup>(1)</sup>	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)

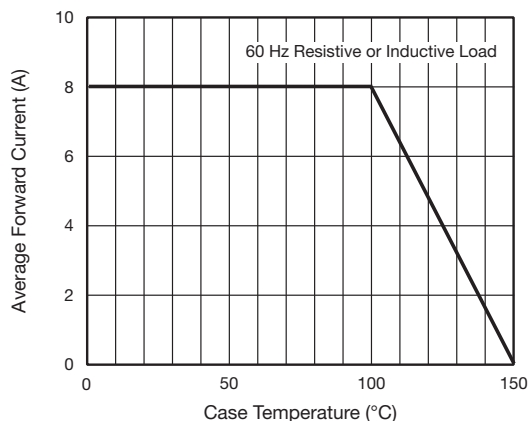


Fig. 1 - Forward Current Derating Curve

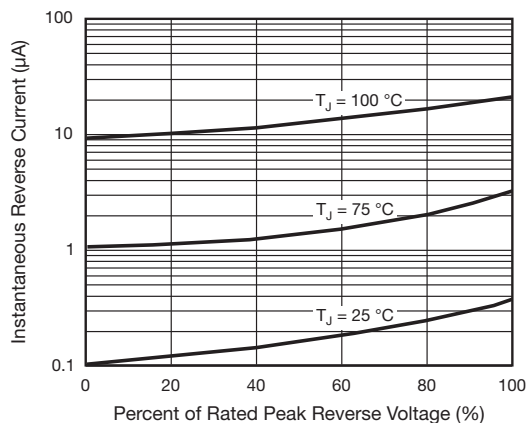


Fig. 4 - Typical Reverse Characteristics

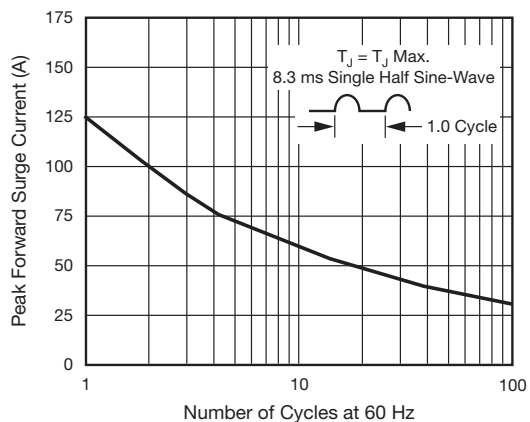


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

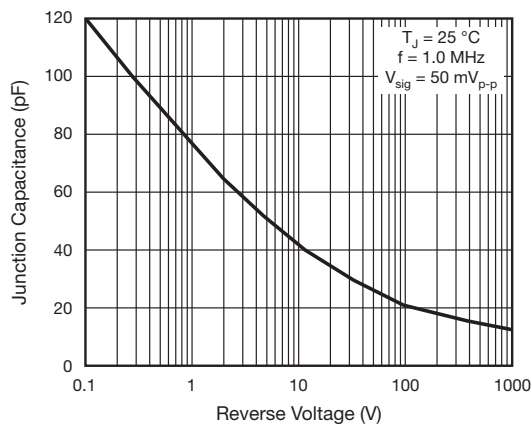


Fig. 5 - Typical Junction Capacitance Per Leg

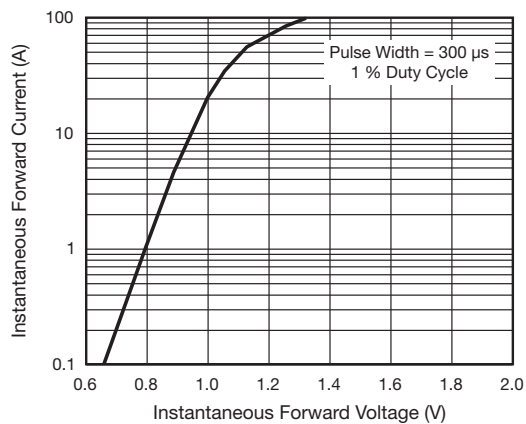
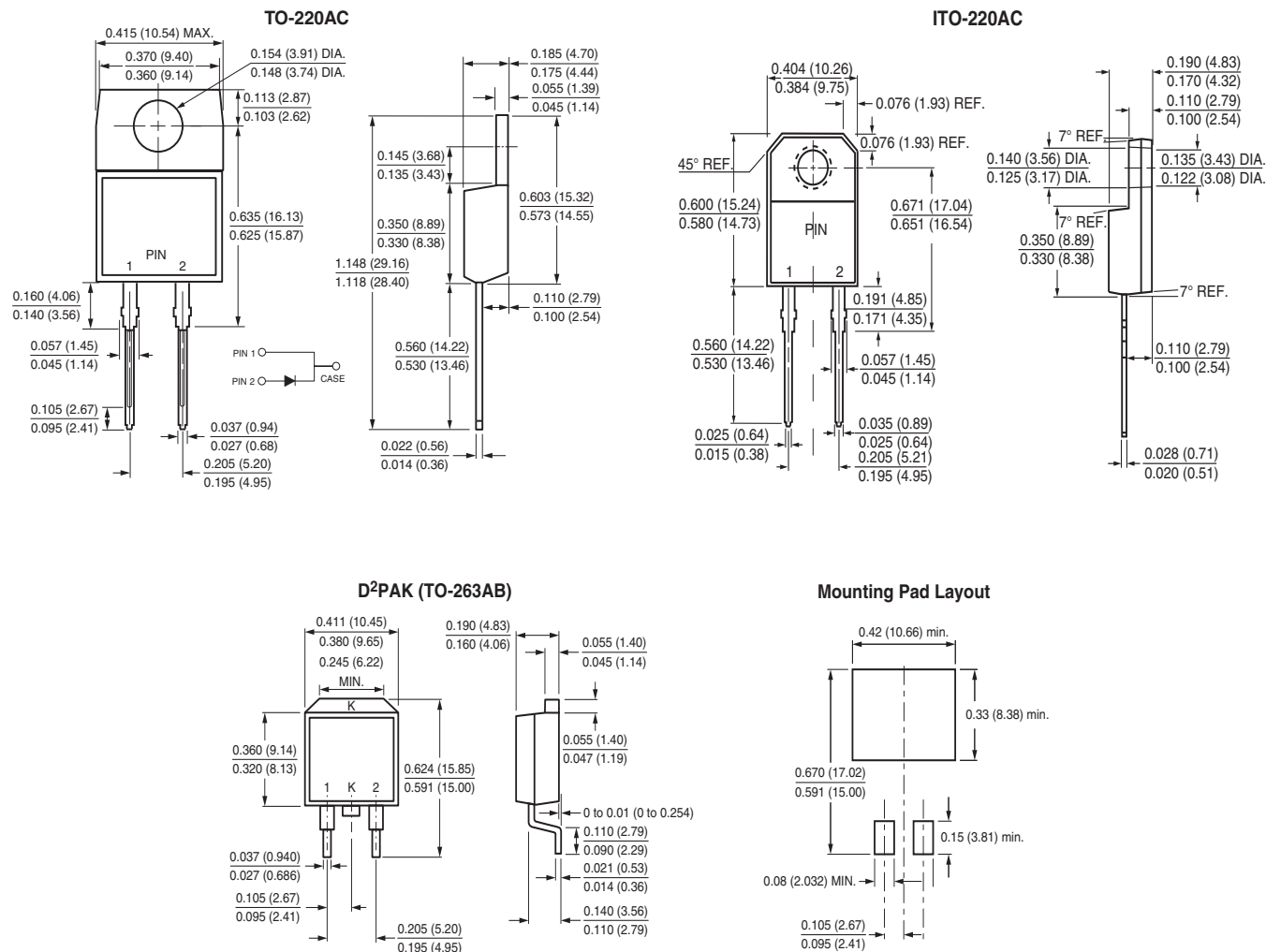


Fig. 3 - Typical Instantaneous Forward Characteristics



## PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





## Disclaimer

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