



ELECTRICAL CHARACTERISTICS (T <sub>A</sub> = 25 °C unless otherwise noted)						
PARAMETER	TEST CONDITIONS		SYMBOL	TYP.	MAX.	UNIT
Instantaneous forward voltage per diode	I <sub>F</sub> = 5 A	T <sub>A</sub> = 25 °C	V <sub>F</sub> (1)	0.66	-	V
	I <sub>F</sub> = 10 A			0.75	-	
	I <sub>F</sub> = 20 A			0.86	1.20	
	I <sub>F</sub> = 5 A	T <sub>A</sub> = 125 °C		0.52	-	
	I <sub>F</sub> = 10 A			0.59	-	
	I <sub>F</sub> = 20 A			0.68	0.76	
Reverse current per diode	V <sub>R</sub> = 136 V	T <sub>A</sub> = 25 °C	I <sub>R</sub> (2)	1.3	-	μA
		T <sub>A</sub> = 125 °C		2.2	-	mA
	V <sub>R</sub> = 170 V	T <sub>A</sub> = 25 °C		-	250	μA
		T <sub>A</sub> = 125 °C		4.2	50	mA

**Notes**

- (1) Pulse test: 300 μs pulse width, 1 % duty cycle
- (2) Pulse test: Pulse width ≤ 20 ms

THERMAL CHARACTERISTICS (T <sub>A</sub> = 25 °C unless otherwise noted)				
PARAMETER		SYMBOL	V40170C	UNIT
Typical thermal resistance	per diode	R <sub>θJC</sub>	1.2	°C/W
	per device		0.85	

ORDERING INFORMATION (Example)					
PACKAGE	PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
TO-220AB	V40170C-M3/4W	1.85	4W	50/tube	Tube

**RATINGS AND CHARACTERISTICS CURVES (T<sub>A</sub> = 25 °C unless otherwise noted)**

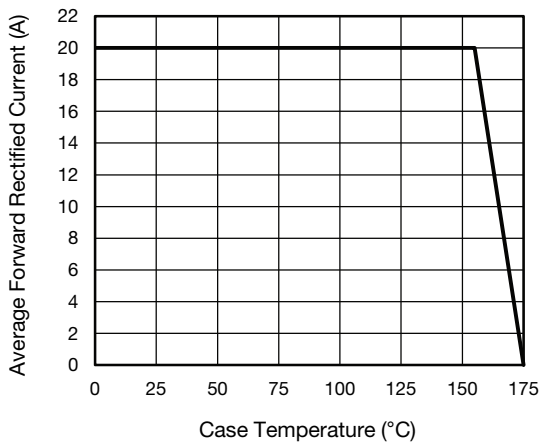


Fig. 1 - Maximum Forward Current Derating Curve

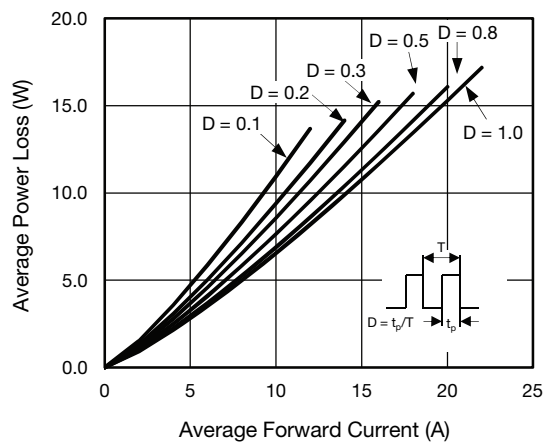


Fig. 2 - Forward Power Loss Characteristics Per Diode

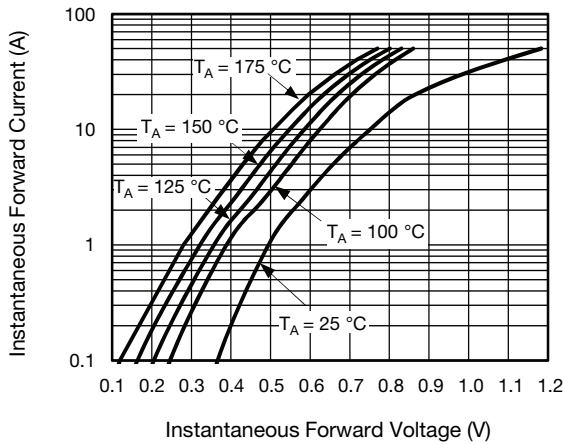


Fig. 3 - Typical Instantaneous Forward Characteristics Per Diode

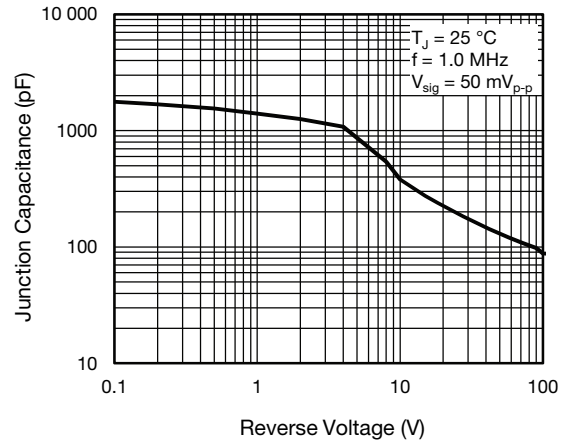


Fig. 5 - Typical Junction Capacitance Per Diode

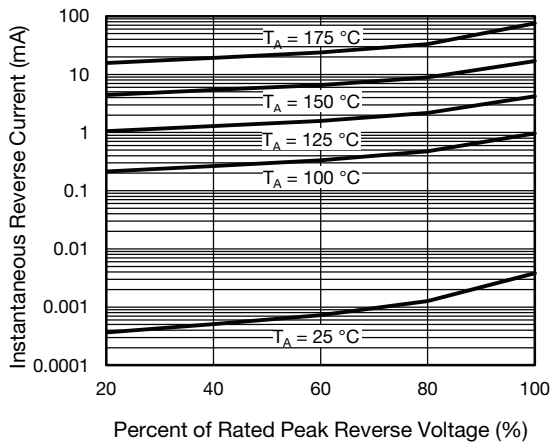


Fig. 4 - Typical Reverse Characteristics Per Diode

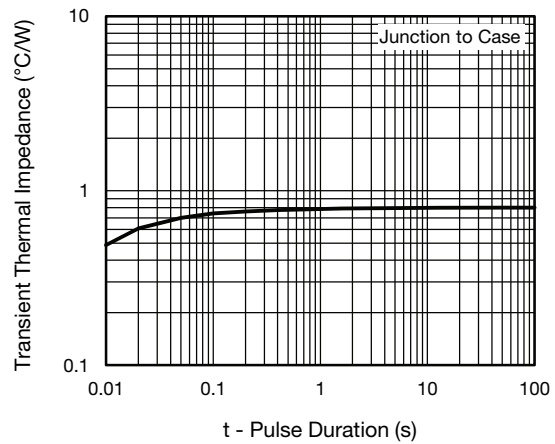
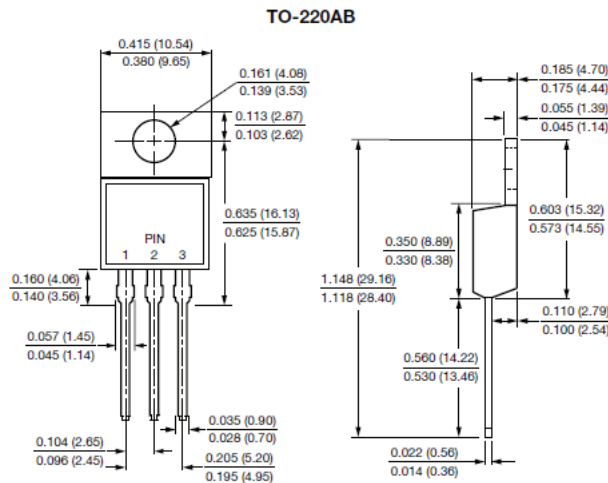


Fig. 6 - Typical Transient Thermal Impedance Per Device

**PACKAGE OUTLINE DIMENSIONS** in inches (millimeters)





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