



ELECTRICAL CHARACTERISTICS (T _C = 25 °C unless otherwise noted)					
PARAMETER	SYMBOL	TEST CONDITIONS		VALUE	UNIT
Maximum instantaneous forward voltage per diode	V _F ⁽¹⁾	I _F = 20 A	T _C = 125°C	0.60	V
		I _F = 30 A	T _C = 25°C	0.76	
		I _F = 30 A	T _C = 125°C	0.72	
Maximum instantaneous reverse current at DC blocking voltage per diode	I _R ⁽¹⁾	Rated V _R	T _J = 25 °C	1.0	mA
			T _J = 125 °C	60	

Notes

- (1) Pulse test: 300 μs pulse width, 1 % duty cycle
- (2) Pulse test: pulse width ≤ 40 ms

THERMAL CHARACTERISTICS (T _C = 25 °C unless otherwise noted)			
PARAMETER	SYMBOL	MBRB	UNIT
Typical thermal resistance per diode	R _{θJC}	1.5	°C/W

ORDERING INFORMATION (Example)					
PACKAGE	PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
TO-263AB	MBRB3045CT-E3/45	1.35	45	50/tube	Tube
TO-263AB	MBRB3045CT-E3/81	1.35	81	800/reel	Tape and reel
TO-263AB	MBRB3045CTHE3_B/P ⁽¹⁾	1.35	P	50/tube	Tube
TO-263AB	MBRB3045CTHE3_B/I ⁽¹⁾	1.35	I	800/reel	Tape and reel

Note

- (1) AEC-Q101 qualified

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

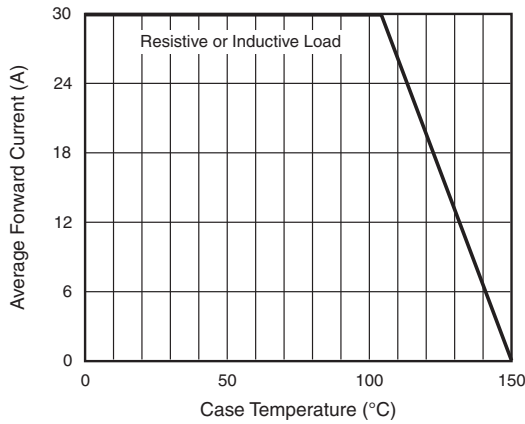


Fig. 1 - Forward Current Derating Curve

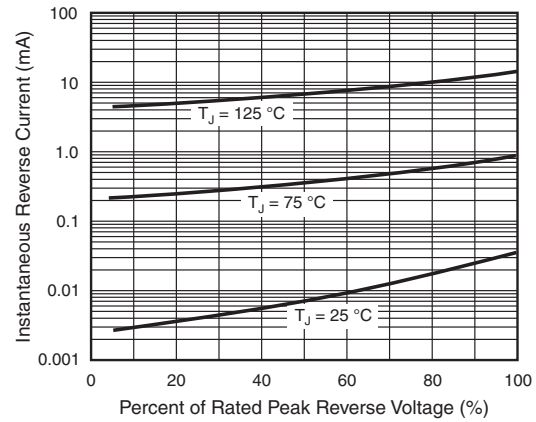


Fig. 4 - Typical Reverse Characteristics Per Diode

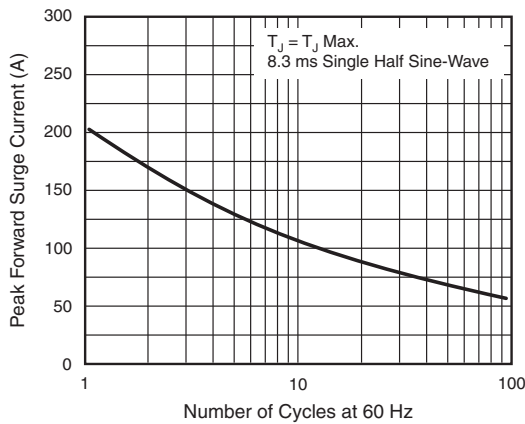


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

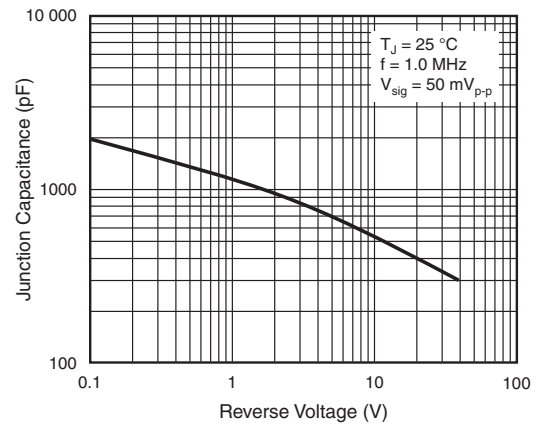


Fig. 5 - Typical Junction Capacitance Per Diode

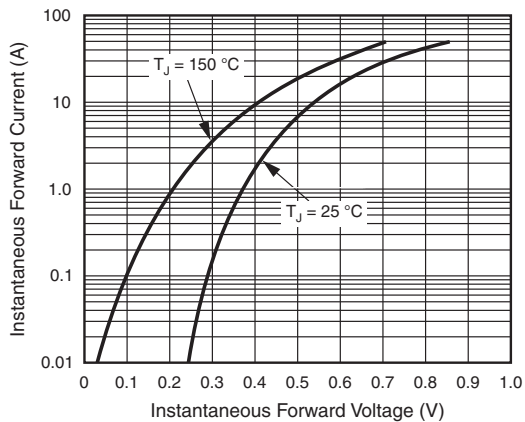


Fig. 3 - Typical Instantaneous Forward Characteristics Per Diode

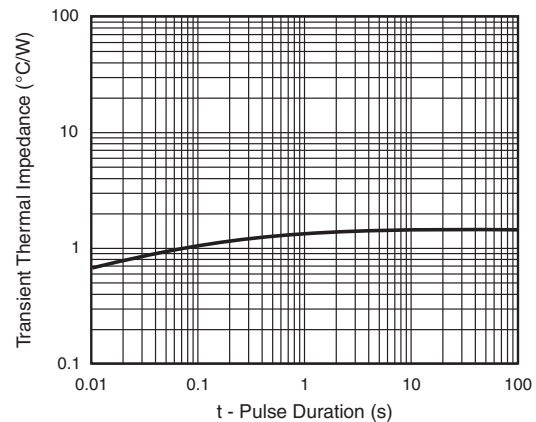
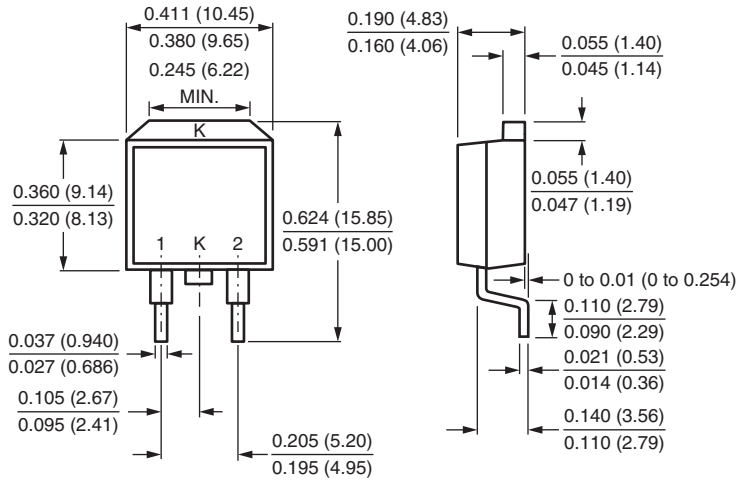


Fig. 6 - Typical Transient Thermal Impedance Per Diode

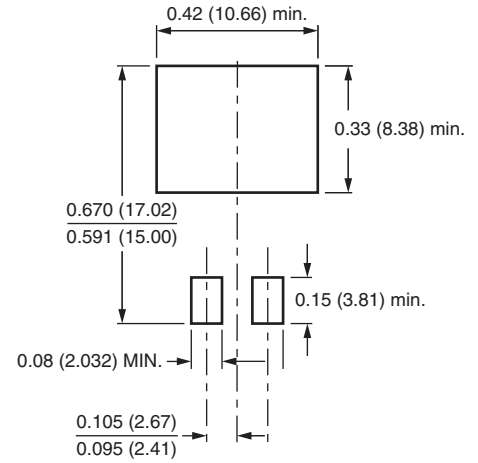


PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

D²PAK (TO-263AB)



Mounting Pad Layout





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