ELECTRICAL CHARACTERISTICS (T_A = 25 °C unless otherwise noted)						
PARAMETER	**TEST CONDITIONS**		**SYMBOL**	**TYP.**	**MAX.**	**UNIT**
Instantaneous forward voltage	I_F = 2 A	T_A = 25 °C	V_F (1)	0.86	0.90	V
		T_A = 100 °C		0.76	0.83	
Reverse current	Rated V_R	T_A = 25 °C	I_R (2)	-	10	µA
		T_A = 100 °C		180	350	
Reverse recovery time	I_F = 0.5 A, I_R = 1.0 A, I_{rr} = 0.25 A	T_A = 25 °C	t_{rr}	-	20	ns
	I_F = 2.0 A, dI/dt = 50 A/µs, V_R = 30 V, I_{rr} = 0.1 I_{RM}	T_A = 25 °C		27	-	
		T_A = 100 °C		35	-	
Storage charge	I_F = 2.0 A, dI/dt = 50 A/µs, V_R = 30 V, I_{rr} = 0.1 I_{RM}	T_A = 25 °C	Q_{rr}	9	-	nC
		T_A = 100 °C		19	-	
Typical junction capacitance	4.0 V, 1 MHz		C_J	16	-	pF

Notes

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

(2) Pulse test: Pulse width ≤ 40 ms

THERMAL CHARACTERISTICS (T_A = 25 °C unless otherwise noted)					
PARAMETER	**SYMBOL**	**U2B**	**U2C**	**U2D**	**UNIT**
Typical thermal resistance	$R_{\theta JA}$ (1)	105			°C/W
	$R_{\theta JM}$ (1)	18			

Note

(1) Free air, mounted on recommended copper pad area. Thermal resistance $R_{\theta JA}$ - junction to ambient, $R_{\theta JM}$ - junction to mount

ORDERING INFORMATION (Example)				
PREFERRED P/N	**UNIT WEIGHT (g)**	**PREFERRED PACKAGE CODE**	**BASE QUANTITY**	**DELIVERY MODE**
U2D-E3/52T	0.099	52T	750	7" diameter plastic tape and reel
U2D-E3/5BT	0.099	5BT	3200	13" diameter plastic tape and reel
U2D-M3/52T	0.099	52T	750	7" diameter plastic tape and reel
U2D-M3/5BT	0.099	5BT	3200	13" diameter plastic tape and reel

RATINGS AND CHARACTERISTICS CURVES (T_A = 25 °C unless otherwise noted)

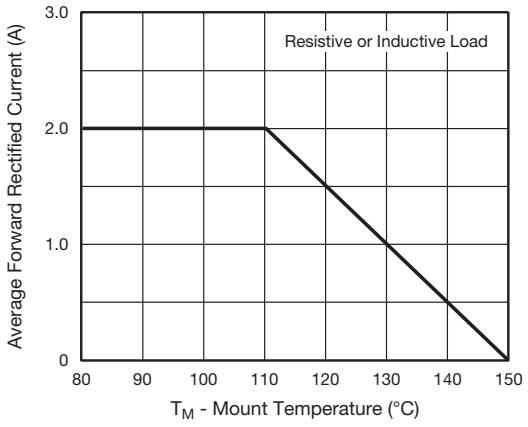


Fig. 1 - Maximum Forward Current Derating Curve

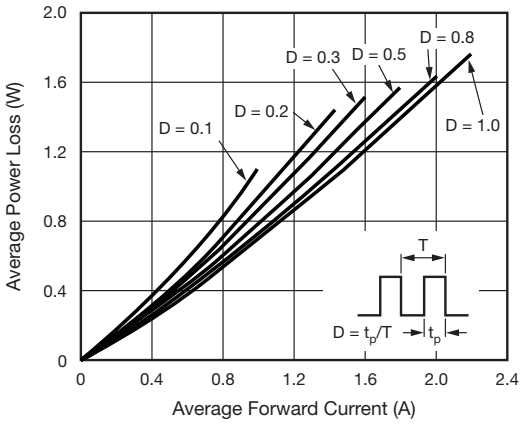


Fig. 2 - Forward Power Loss Characteristics

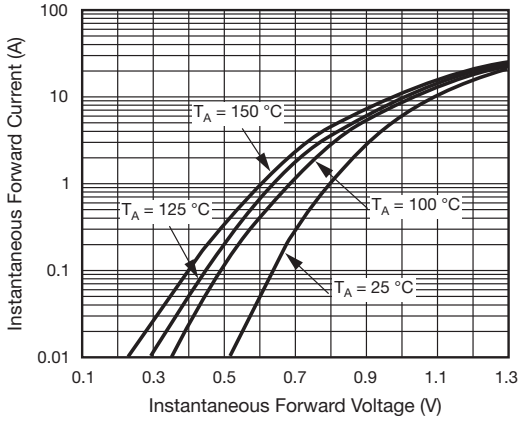


Fig. 3 - Typical Instantaneous Forward Characteristics

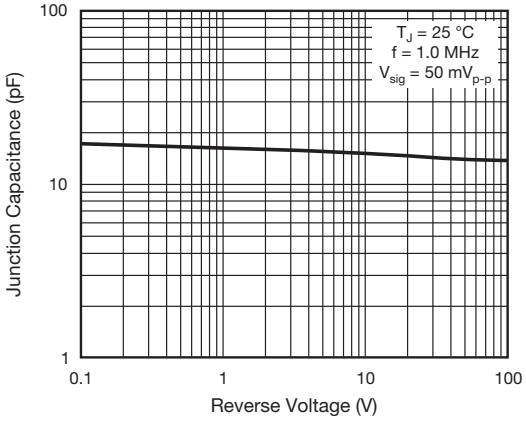


Fig. 5 - Typical Junction Capacitance

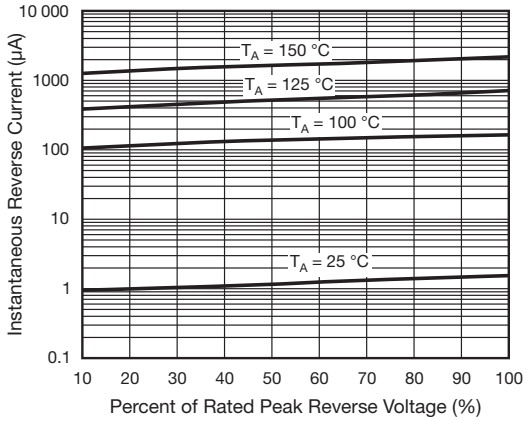


Fig. 4 - Typical Reverse Characteristics

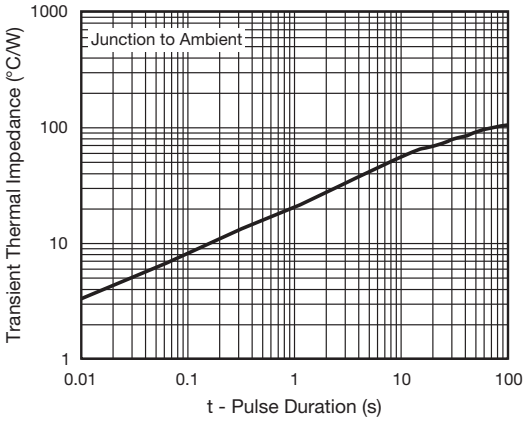
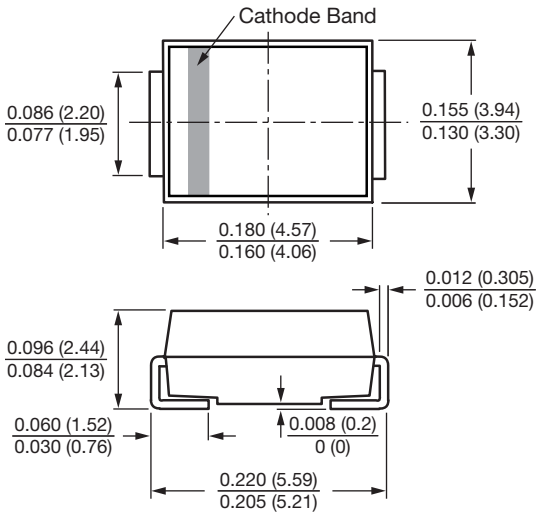


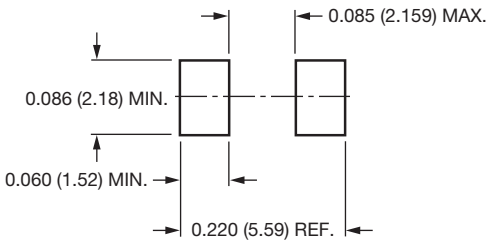
Fig. 6 - Typical Transient Thermal Impedance

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

SMB (DO-214AA)



Mounting Pad Layout



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