

Maximum Ratings (@T_A = +25°C, unless otherwise specified.)

Characteristic		Symbol	Value	Unit
Repetitive Peak Reverse Voltage		V_{RRM}	400	V
Working Peak Reverse Voltage DC Blocking Voltage		V_{RWM} V_{R}	350	V
RMS Reverse Voltage		$V_{R(RMS)}$	247	V
Forward Continuous Current (Note 5)		I _{FM}	300	mA
Peak Repetitive Forward Current (Note 5)		I _{FRM}	625	mA
Non-Repetitive Peak Forward Surge Current	@ t = 1.0µs @ t = 1.0ms	I _{FSM}	4.0 2.0	A

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 5) (See Figure 1)	P_{D}	350	mW
Thermal Resistance Junction to Ambient Air (Note 5)	$R_{ heta JA}$	357	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C

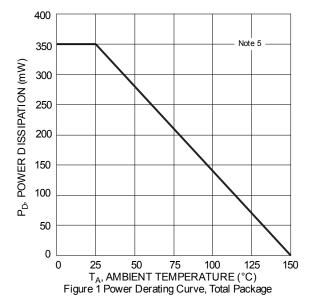
Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

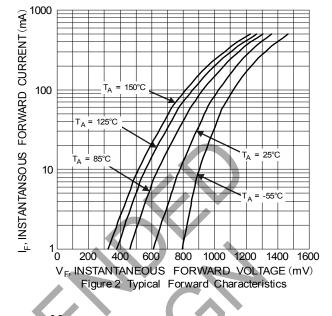
Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 6)	V _{(BR)R}	400			V	I _R = 150μA
Forward Voltage	V _E			1.08 1.27 1.50	,	I _F = 20mA I _F = 100mA I _F = 200mA
Reverse Current (Note 6)	l _R			1 100	•	V _R = 240V V _R = 240V, T _J = +150°C
Total Capacitance	C _T	_	0.9	2.5	pF	V _R = 0V, f = 1.0MHz
Reverse Recovery Time	t _{RR}	7		35		$I_F = I_R = 30\text{mA},$ $I_{RR} = 3.0\text{mA}, R_L = 100\Omega$

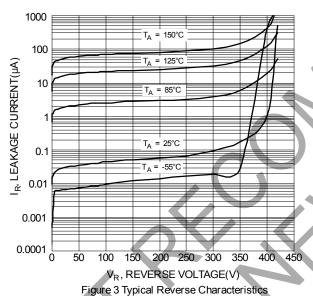
5. Part mounted on FR-4 board with recommended pad layout, which can be found on our website at http://www.diodes.com.6. Short duration pulse test used to minimize self-heating effect. Notes:











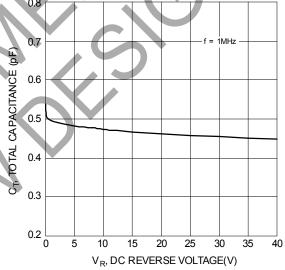


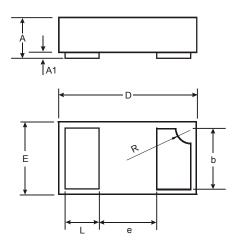
Figure 4 Typical Total Capacitance vs. Reverse Voltage



Package Outline Dimensions

Please see http://www.diodes.com/package-outlines.html for the latest version.

X1-DFN1006-2

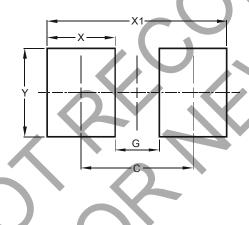


X1-DFN1006-2						
Dim	Min	Max	Тур			
Α	0.47	0.53	0.50			
A 1	0	0.05	0.03			
b	0.45	0.55	0.50			
D	0.95	1.075	1.00			
Е	0.55	0.675	0.60			
е	_	_	0.40			
L	0.20	0.30	0.25			
R	0.05	0.15	0.10			
All Dimensions in mm						

Suggested Pad Layout

Please see http://www.diodes.com/package-outlines.html for the latest version.

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Dimensions	Value			
Dimensions	(in mm)			
С	0.70			
G	0.30			
Х	0.40			
X1	1.10			
Υ	0.70			



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