

Features

- Capacitance: 0.3pF(typ.)
- Reverse Working Voltage: 5.0V
- Compliant to Halogen-free
- Suffix “-Q1” for AEC-Q101

Applications

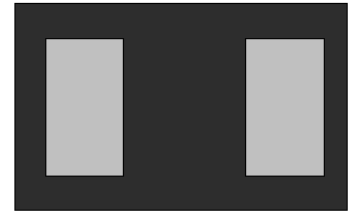
- Smart Phone and Tablet PC
- TV and Set Top Box
- Wearable Devices
- PDA

Protection Solution to Meet

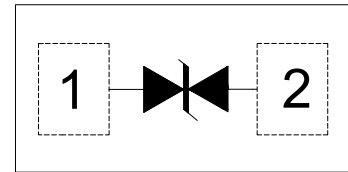
- IEC 61000-4-2 (ESD Air): +30KV
- IEC 61000-4-2 (ESD Contact): +30KV
- IEC 61000-4-5 (Lightning 8/20μs): 5.5A

Mechanical Data

- DFN-2L package
- Marking code : 5F



DFN-2L(0402)



Pin Configuration

Absolute Maximum Ratings (T_A=25°C unless otherwise noted)

Symbol	Parameter	Conditions	Min	Max	Unit
V _{ESD}	Electrostatic Discharge Voltage	IEC 61000-4-2; Contact Discharge	-	±30	kV
		IEC 61000-4-2; Air Discharge	-	±30	kV
P _{PP}	Peak Pulse Power	t _P = 8/20 μs	-	55	W
I _{PPM}	Rated Peak Pulse Current	t _P = 8/20 μs	-	5.5	A
T _A	Ambient Temperature Range	-	-55	125	°C
T _{stg}	Storage Temperature Range	-	-55	150	°C

Electrical Characteristics (T_A=25°C unless otherwise noted)

Symbol	Parameter	Conditions	Min	Typ.	Max	Unit
V _{RWM}	Reverse Working Voltage	T _A = 25 °C	-	-	5.0	V
V _{BR}	Breakdown Voltage	I _R = 1mA; T _A = 25 °C	5.8	7.5	9.5	V
I _R	Reverse Leakage Current	V _{RWM} = 5V; T _A = 25 °C	-	-	0.2	μA
V _C	Clamping Voltage	TLP, t _P = 0.2/100ns, I _{TLP} = 16A	-	9.0	-	V
		I _{PP} = 1A, t _P = 8/20μs	-	5.8	7.5	V
		I _{PP} = 5.5A, t _P = 8/20μs	-	8	10	V
C _J	Junction Capacitance	V _R = 0V, f = 1 MHz	-	0.3	0.4	pF

Typical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

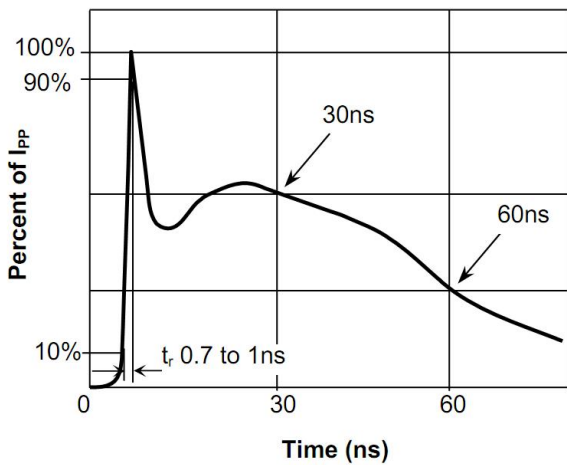


Fig.1 Pulse Waveform-ESD (IEC61000-4-2)

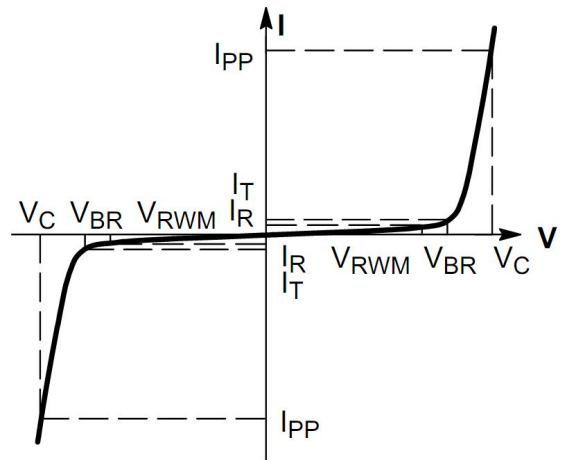


Fig.2 V-I Characteristics for Bidirectional Diode

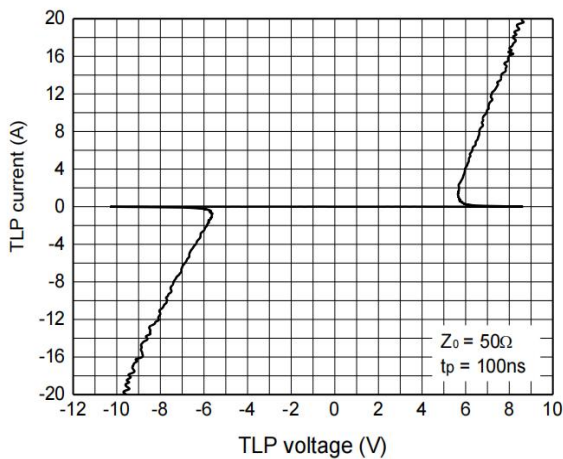


Fig.3 Transmission Line Pulse (TLP)

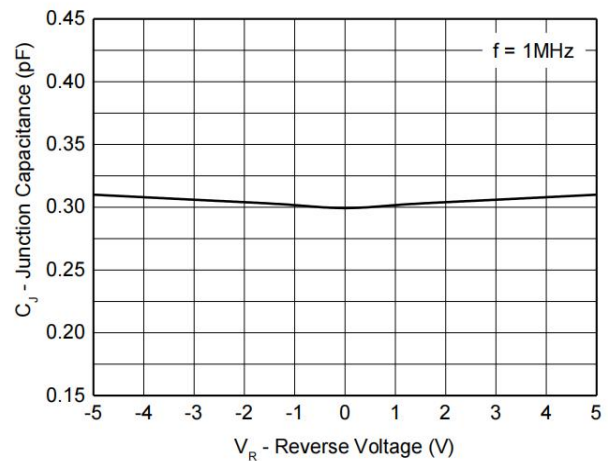


Fig.4 Capacitance-Voltage Curve

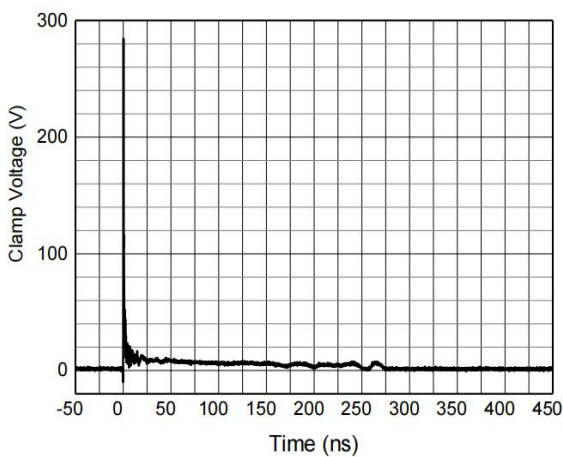


Fig.5 Clamping Voltage at IEC61000-4-2
+8kV Pulse Waveform

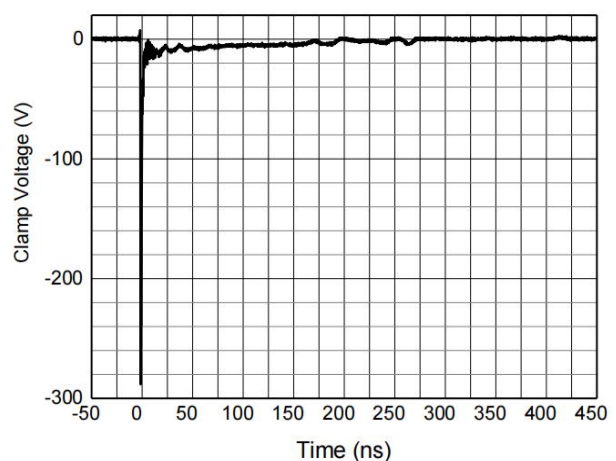
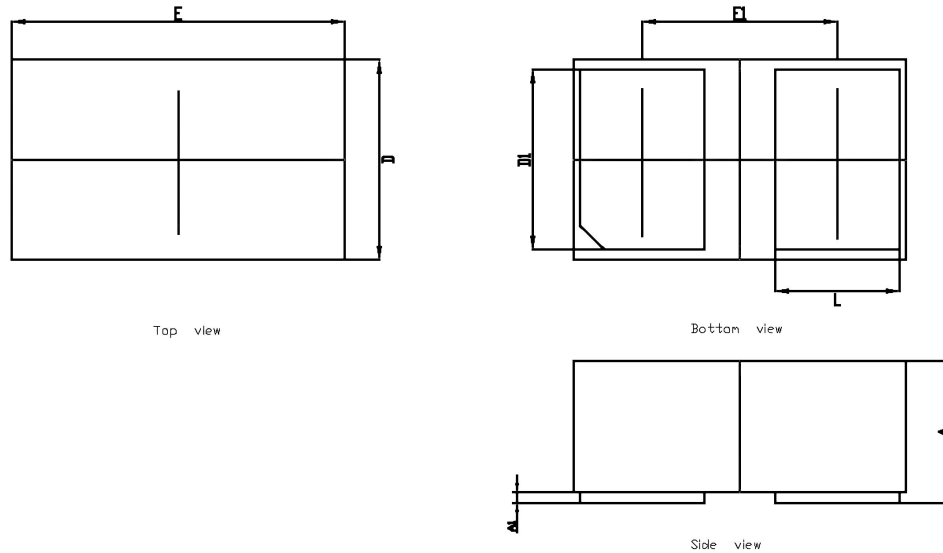


Fig.6 Clamping Voltage at IEC61000-4-2
-8kV Pulse Waveform

Package Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.350	0.450	0.014	0.018
D	0.550	0.650	0.022	0.026
E	0.950	1.050	0.037	0.041
D1	0.420	0.520	0.017	0.020
E1	0.550	0.650	0.022	0.026
L	0.270	0.370	0.011	0.015
A1	-	0.050	-	0.002

