



Hi-Surge ESD Protection

Voltage

20 V

Features

• IEC61000-4-2(ESD) : ± 30 kV Air, ± 30 kV Contact

• IEC61000-4-4(EFT) : 40 A(5/50 ns)

• IEC61000-4-5(Lightning) : 8 A(8/20 uS)

• Low leakage current, maximum of 100nA at rated voltage

• Low clamping voltage

• Lead free in compliance with EU RoHS 2.0

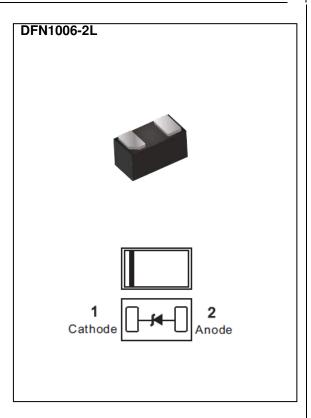
• Green molding compound as per IEC 61249 standard

Mechanical Data

• Case: DFN1006-2L Package

• Terminals : Solderable per MIL-STD-750, Method 2026

• Approx. Weight: 0.0006 grams



Maximum Ratings and Thermal Characteristics (T_A = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
ESD IEC61000-4-2(Air)	±30		14/
ESD IEC61000-4-2(Contact)	V _{ESD}	±30	kV
Operating Junction Temperature Range	TJ	-55~150	°C
Storage Temperature Range	T _{STG}	-55~150	°C





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

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Reverse Stand-Off Voltage(Note 1)	V_{RWM}	-	-	-	20	V
Reverse Breakdown Voltage	V_{BR}	I _{BR} = 1 mA	22	-	25	V
Reverse Leakage Current	I _R	V _R = 20 V	-	-	100	nA
Clamping Voltage	VcL	$I_{PP} = 1 A, t_P = 8/20 us$	-	-	27	V
		I _{PP} = 8 A, t _P = 8/20 us	-	-	35	
Clamping Voltage TLP(Note 2)	V _{CL}	$I_{PP} = 8 A, t_P = 100 ns$	-	28.3	-	V
		$I_{PP} = 16 \text{ A}, t_P = 100 \text{ns}$	-	31.6	-	
Dynamic Resistance	R _{DYN}	t _P = 100ns	-	0.41	_	Ω
Off State Junction Capacitance	CJ	0 Vdc Bias f = 1MHz	-	_	60	рF

NOTES:

- 1. A transient suppressor is selected according to the working peak reverse voltage(V_{RWM}), which should be equal to or greater than the DC or continuous peak operation voltage level.
- 2. Testing using Transmission Line Pulse (TLP) conditions: Z0 = 50 Ω , t_P = 100 ns.





TYPICAL CHARACTERISTIC CURVES

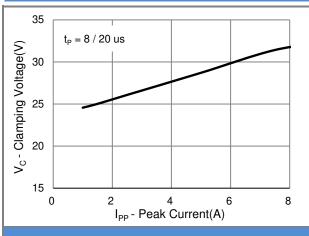


Fig.1 Typical Peak Clamping Voltage

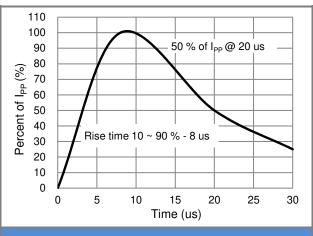


Fig.2 Pulse Waveform

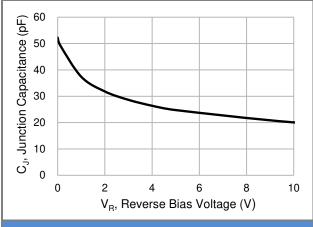
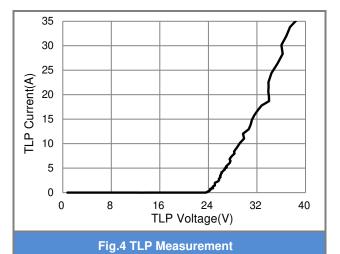


Fig.3 Typical Junction Capacitance



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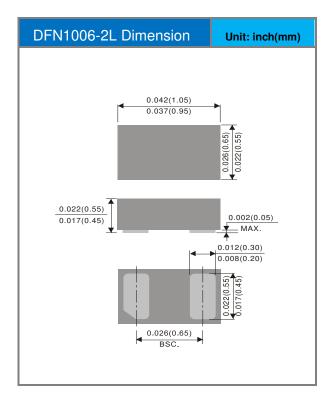


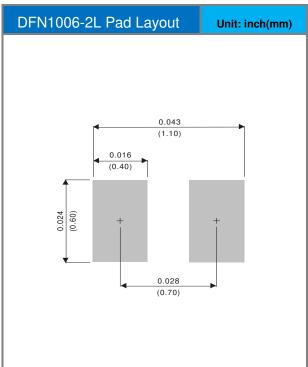


Product and Packing Information

Part No.	Package Type	Packing Type	Marking	Version
PE3620M1Q	DFN1006-2L	10K pcs / 7" Reel	HC	Halogen free RoHS compliant

Packaging Information & Mounting Pad Layout









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