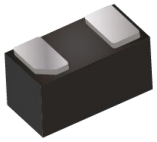
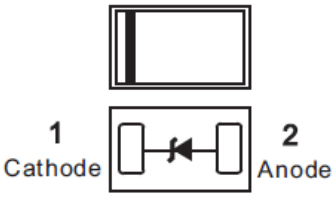
PE4207M1Q

Hi-Surge ESD Protection

Voltage **7 V**

DFN1006-2L





Features

- IEC61000-4-2(ESD)：± 30 kV Air, ± 15 kV Contact
- IEC61000-4-4(EFT)：40 A(5/50 ns)
- IEC61000-4-5(Lightning)：21 A(8/20 uS)
- Low leakage current, maximum of 1uA 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) ESD IEC61000-4-2(Contact)	V_{ESD}	±30 ±30	kV
Operating Junction Temperature Range	T_J	-55~150	°C
Storage Temperature Range	T_{STG}	-55~150	°C

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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}	-	-	-	7	V
Reverse Breakdown Voltage	V_{BR}	I_{BR} = 1 mA	7.8	-	9.5	V
Reverse Leakage Current	I_R	V_R = 7 V	-	-	1000	nA
Clamping Voltage	V_{CL}	I_{PP} = 1 A, t_P = 8/20 us	-	-	9	V
		I_{PP} = 21 A, t_P = 8/20 us	-	-	13.5	
Clamping Voltage TLP(Note 2)	V_{CL}	I_{PP} = 8 A, t_P = 100 ns	-	11	-	V
		I_{PP} = 16 A, t_P = 100 ns	-	13.6	-	
Dynamic Resistance	R_{DYN}	t_P = 100 ns	-	0.33	-	Ω
Off State Junction Capacitance	C_J	0 Vdc Bias f = 1MHz	-	-	200	pF

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.

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TYPICAL CHARACTERISTIC CURVES

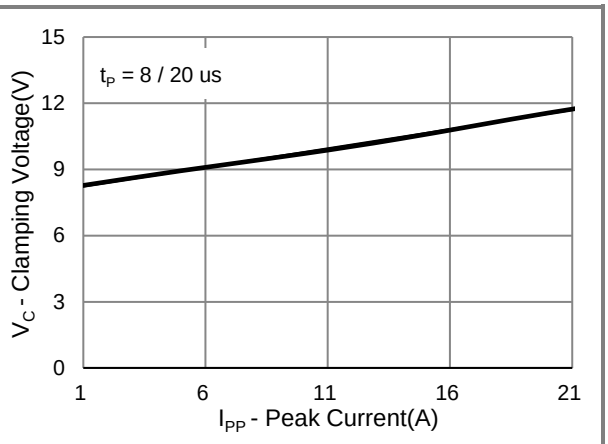


Fig.1 Typical Peak Clamping Voltage

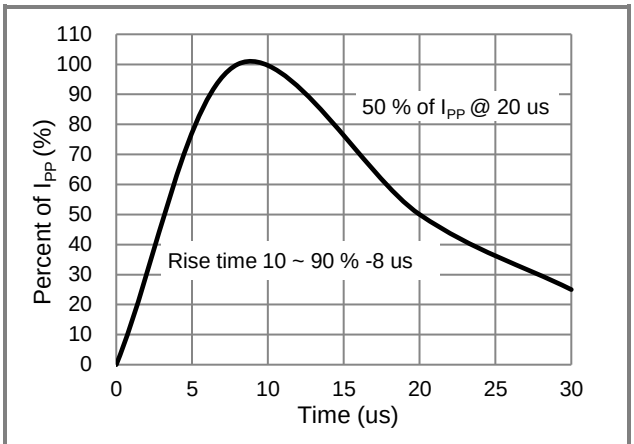


Fig.2 Pulse Waveform

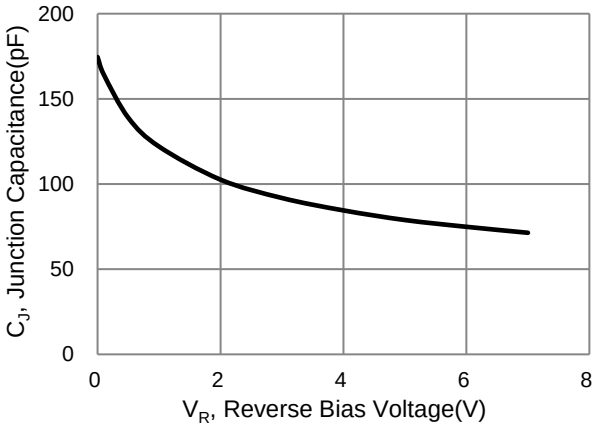


Fig.3 Typical Junction Capacitance

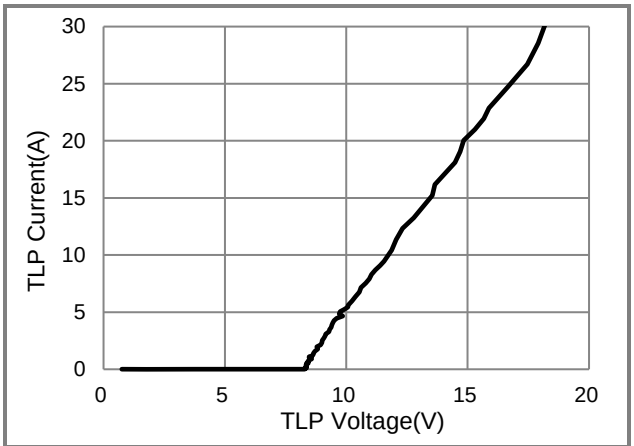


Fig.4 TLP Measurement

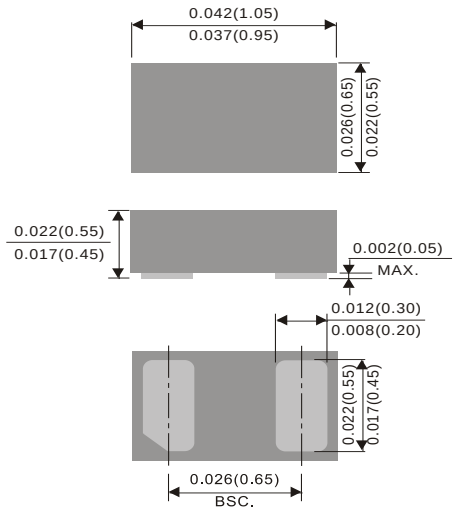
PE4207M1Q

Product and Packing Information

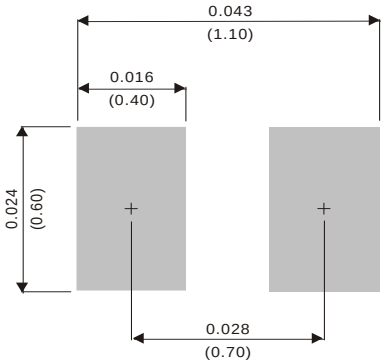
Part No.	Package Type	Packing Type	Marking	Version
PE4207M1Q	DFN1006-2L	10K pcs / 7" Reel	HB	Halogen free RoHS compliant

Packaging Information & Mounting Pad Layout

DFN1006-2L Dimension — Unit: inch(mm)



DFN1006-2L Pad Layout — Unit: inch(mm)



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