



PEC3107M1AQ

Low Capacitance ESD Protection

Voltage

7 V

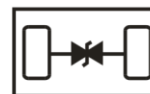
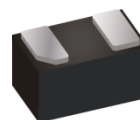
Features

- IEC61000-4-2(ESD): ± 30 kV Air, ± 30 kV Contact
- IEC61000-4-4(EFT): 40 A(5/50 ns)
- IEC61000-4-5(Lightning): 5 A(8/20 μ S)
- Low leakage current, maximum of 1 μ A at rated voltage
- Ultra low capacitance
- Low clamping voltage
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case: Molded plastic, DFN1006-2L
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.00002 ounces, 0.0006 grams

DFN1006-2L



Maximum Ratings and Thermal Characteristics ($T_A = 25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
ESD IEC61000-4-2(Air)	V_{ESD}	± 30	kV
ESD IEC61000-4-2(Contact)		± 30	
Operating Junction Temperature Range	T_J	-55~150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55~150	$^{\circ}\text{C}$



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

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Reverse Stand-Off Voltage	$V_{RWM}^{(1)}$	-	-	-	7	V
Reverse Breakdown Voltage	V_{BR}	$I_{BR} = 1\text{ mA}$	7.5	-	10	V
Reverse Leakage Current	I_R	$V_R = 7\text{ V}$	-	-	1	μA
Clamping Voltage	V_{CL}	$I_{PP} = 1\text{ A}, t_P = 8/20\text{ }\mu\text{s}$	-	-	12	V
		$I_{PP} = 5\text{ A}, t_P = 8/20\text{ }\mu\text{s}$	-	-	15	
Off State Junction Capacitance	C_J	0Vdc Bias $f = 1\text{ MHz}$	-	-	15	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.

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TYPICAL CHARACTERISTIC CURVES

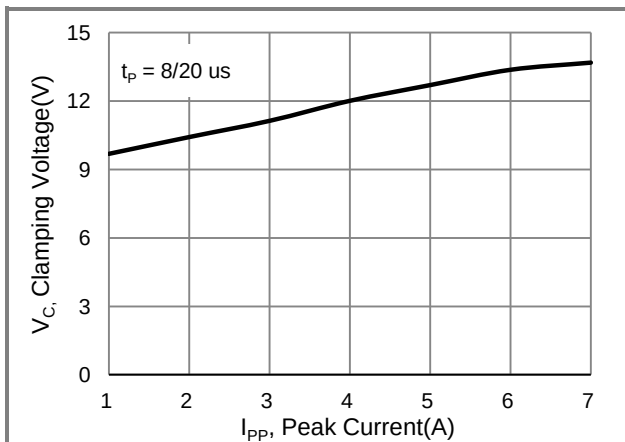


Fig.1 Typical Peak Clamping Voltage

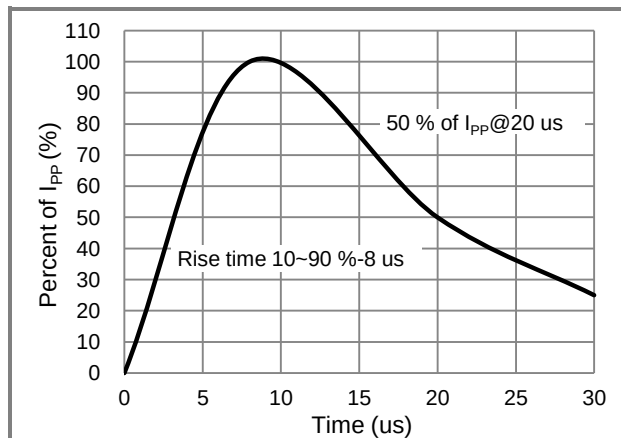


Fig.2 Pulse Waveform

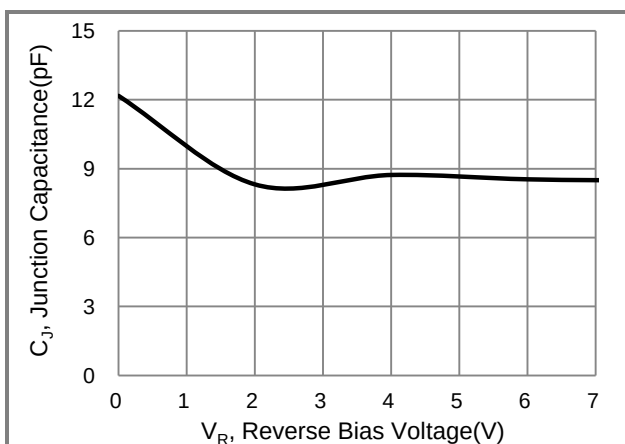


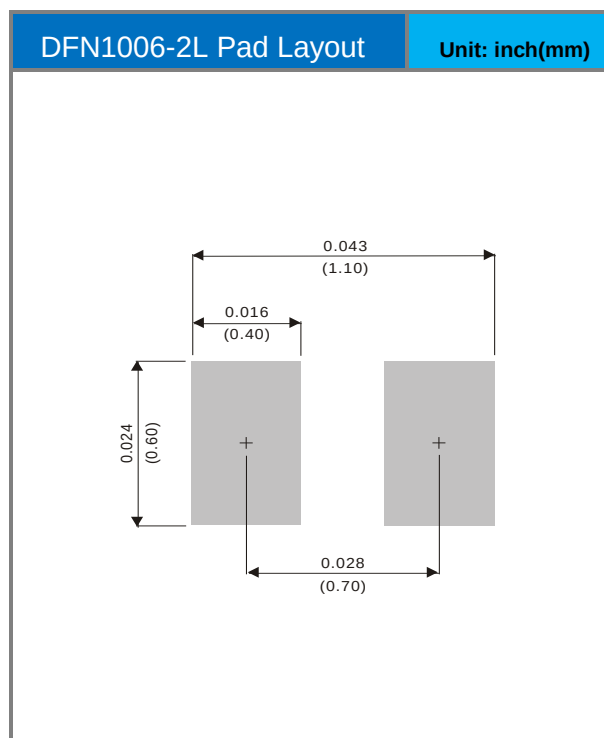
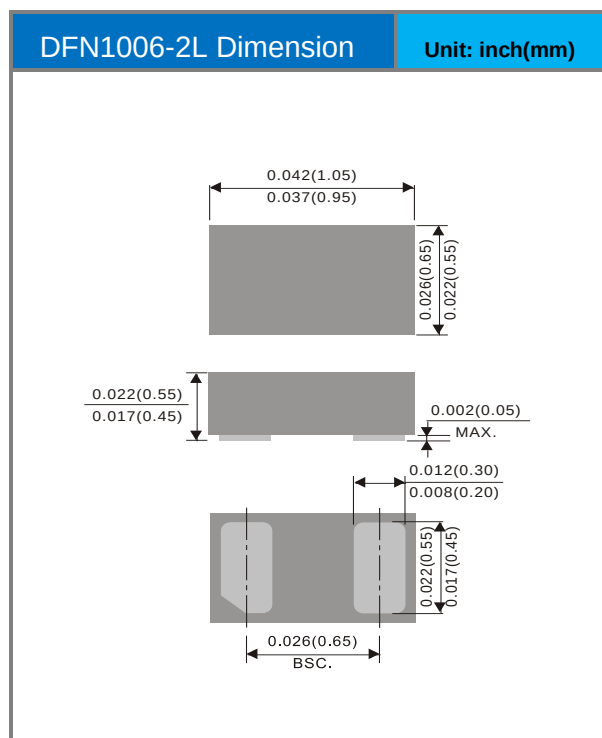
Fig.3 Typical Junction Capacitance

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Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
PEC3107M1AQ_R1_00001	DFN1006-2L	10K / 7" Reel	K7	Halogen Free

Packaging Information & Mounting Pad Layout





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