





## PE1605M2Q

### Electrical Characteristics

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Reverse Stand-Off Voltage <sup>(Note 1)</sup>	$V_{RWM}$	-	-	-	5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_{BR}=1mA$	5.5	-	-	V
Reverse Leakage Current	$I_R$	$V_R=5.0V$	-	-	50	nA
Clamping Voltage	$V_{CL}$	$I_{PP}=1A, t_p=8/20\mu s,$ any I/O pins to GND	-	-	10	V
		$I_{PP}=4A, t_p=8/20\mu s,$ any I/O pins to GND	-	-	15	V
Clamping Voltage TLP <sup>(Note 2)</sup>	$V_{CL}$	$I_{PP}=8A, t_p=100ns,$ any I/O pins to GND	-	16	-	V
		$I_{PP}=16A, t_p=100ns,$ any I/O pins to GND	-	23.5	-	V
Dynamic Resistance	$R_{DYN}$	$t_p=100ns$	-	0.94	-	$\Omega$
Off State Junction Capacitance	$C_J$	2.5Vdc Bias $f=1MHz,$ any I/O pins to GND	-	0.3	0.35	pF
		2.5Vdc Bias $f=1MHz,$ Between any I/O pins	-	0.2	-	pF

Note :

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:  $Z_0 = 50\Omega, t_p = 100 ns$ .



# PE1605M2Q

## TYPICAL CHARACTERISTIC CURVES

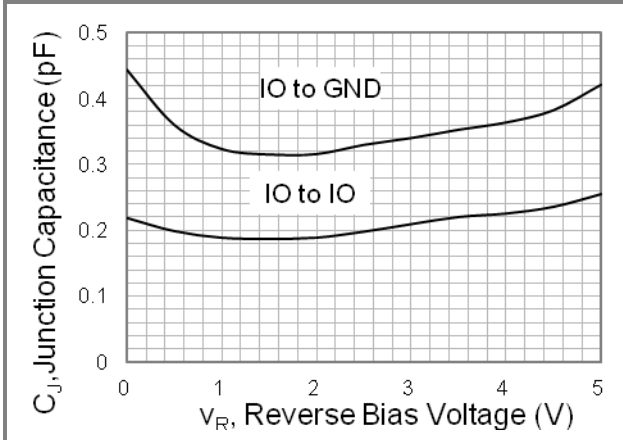


Fig.1 Typical Junction Capacitance

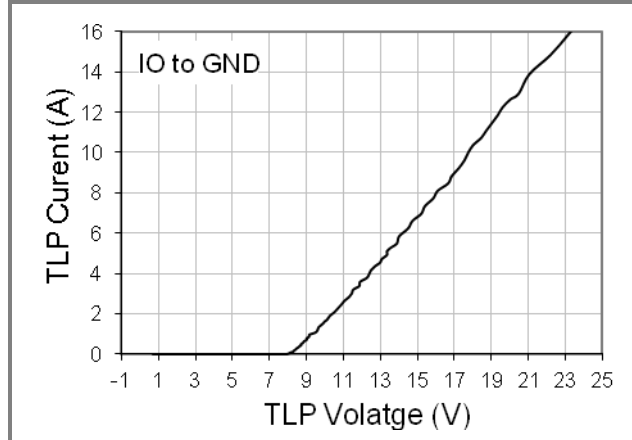


Fig.2 Transmission Line Pulsing (TLP) Measurement

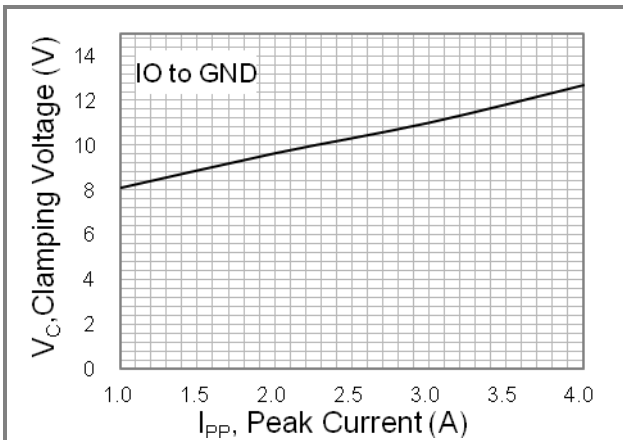


Fig.3 Typical Peak Clamping Voltage(8/20µs)

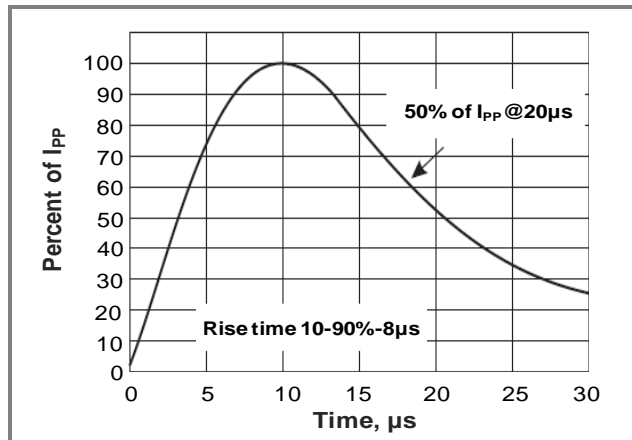


Fig.4 8/20µs Pulse Waveform

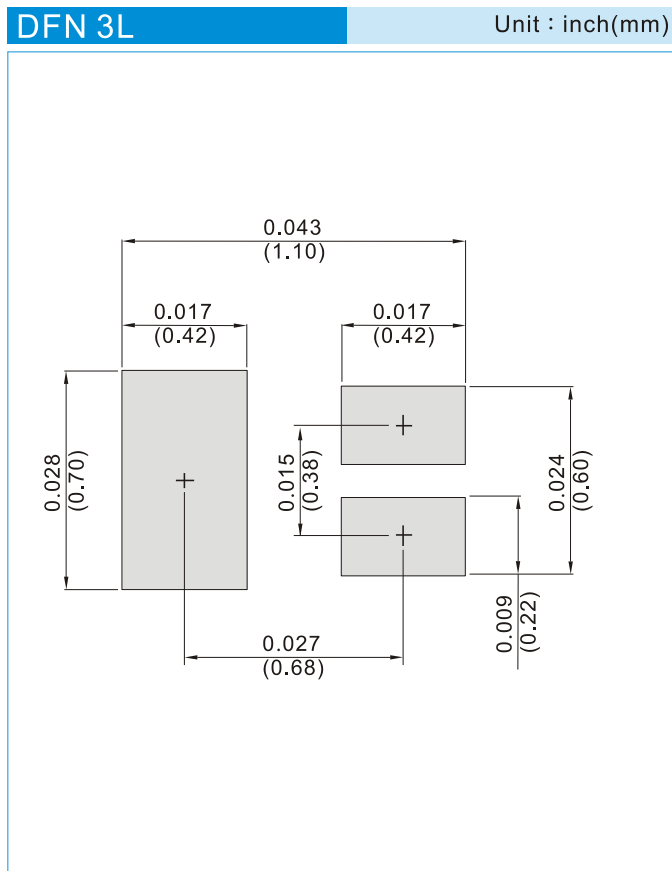


# PE1605M2Q

## PART NO PACKING CODE VERSION

Part No Packing Code	Package Type	Packing Type	Marking	Version
PE1605M2Q_R1_00001	DFN 3L	8K pcs / 7" reel	U3	Halogen free

## MOUNTING PAD LAYOUT





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