

Features

- Low Leakage: nA Level
- Ultra Low Capacitance
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C

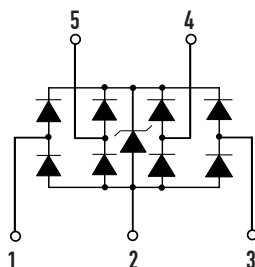
MCC Part Number	Device Marking
ESD5V0PW	5P

IEC61000-4-2(ESD)	Air Contact	±20KV ±15KV
Peak Pulse Current(8/20μs)	I _{PP}	3A
Peak Pulse Power (8/20us)	P _{PK}	36W

Note:

1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

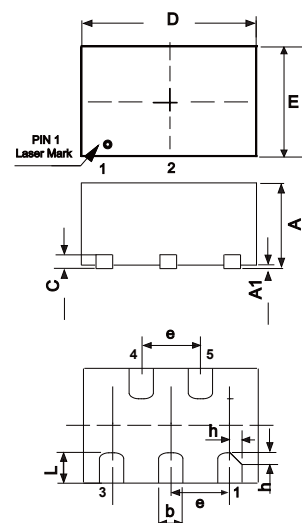
Internal Structure



Pin	Identification
1	I/O 1
2	Ground
3	I/O 2
4	I/O 3
5	I/O 4

ESD Protection Device

DFN1308-5



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.012	0.016	0.30	0.40	
A1	0.000	0.002	0.00	0.05	
b	0.006	0.010	0.15	0.25	
C	0.005		0.127		TYP.
D	0.047	0.056	1.20	1.40	
E	0.028	0.036	0.70	0.90	
e	0.020		0.50		TYP.
h	0.004	0.006	0.10	0.15	
L	0.008	0.012	0.20	0.30	

Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Working Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1\text{mA}$	6.5	7.5	9.0	V
Reverse Leakage Current	I_R	$V_R = 5\text{V}$		10	100	nA
Clamping Voltage I/O-GND	V_C	$I_{PP} = 1\text{A}$, $t_p = 8/20\mu\text{s}$, Pin 1,3,4,5 to 2			10	V
Clamping Voltage I/O-GND	V_C	$I_{PP} = 3\text{A}$, $t_p = 8/20\mu\text{s}$, Pin 1,3,4,5 to 2			12	V
Junction Capacitance	$C_{I/O-GND}$	$V_R = 0\text{V}$, $f = 1\text{MHz}$, Pin Capacitance to GND.		0.35	0.45	pF
Junction Capacitance	$C_{I/O-I/O}$	$V_R = 0\text{V}$, $f = 1\text{MHz}$, Pin Capacitance to I/O.		0.2	0.25	pF

Curve Characteristics

Fig. 1 - 8 X 20 μ s Pulse Waveform

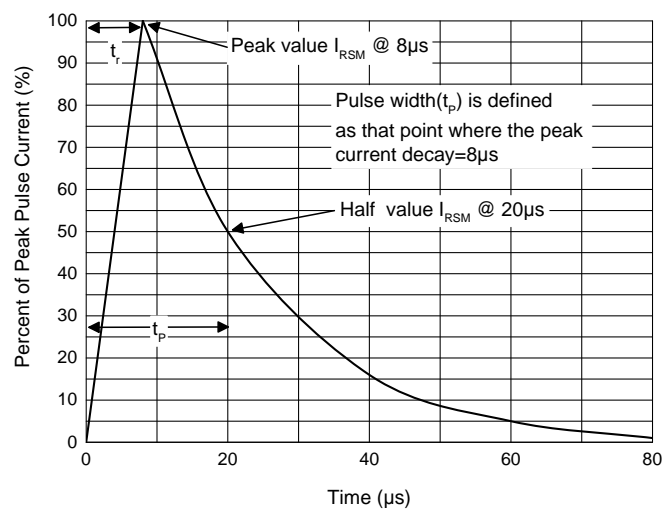
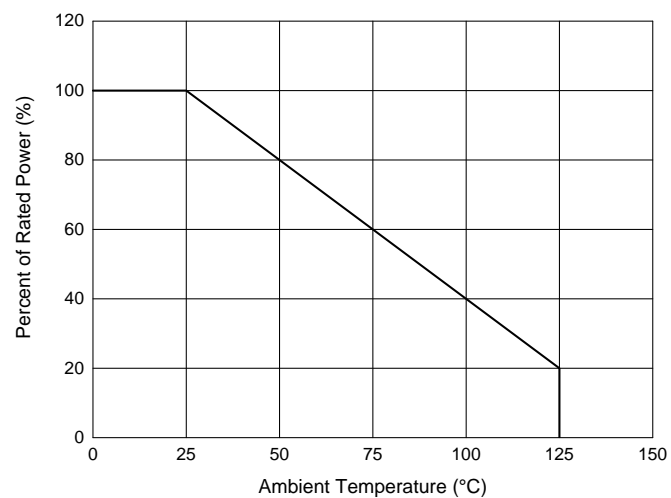


Fig. 2 - Pulse Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 5Kpcs/Reel

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