

## Features

- Protects 4 I/O Lines
- Low Clamping Voltage
- Low Capacitance
- Can Handle Multiple ESD Strikes
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

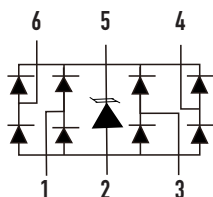
## Maximum Ratings

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

MCC Part Number	Device Marking
PSRV05-4	V05

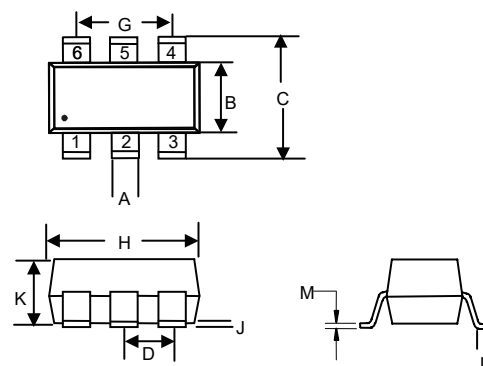
IEC61000-4-2(ESD)	Air Contact	±15KV ±8KV
IEC61000-4-4 (EFT) @5/50ns		40A
Peak Pulse Current(8/20µs)	I <sub>PP</sub>	25A
Peak Pulse Power (8/20us)	P <sub>PK</sub>	500W

## Internal Structure



## ESD Protection Device

## SOT23-6L



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.012	0.020	0.30	0.50	
B	0.051	0.070	1.30	1.80	
C	0.087	0.126	2.20	3.20	
D	0.037		0.95		TYP.
G	0.074		1.90		TYP.
H	0.106	0.122	2.70	3.10	
J	0.002	0.006	0.05	0.15	
K	0.030	0.051	0.75	1.30	
L	0.012	0.024	0.30	0.60	
M	0.003	0.008	0.08	0.22	

**Electrical Characteristics @ 25°C (Unless Otherwise Specified)**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Working Voltage	$V_{RWM}$				5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T = 1mA$ , Pin 5 to Pin 2	6			V
Reverse Leakage Current	$I_R$	$V_{RWM} = 5V$			1	$\mu A$
Clamping Voltage	$V_C$	$I_{PP} = 1A$ , $t_p = 8/20\mu s$ , I/O Pin to GND			12.5	V
Clamping Voltage	$V_C$	$I_{PP} = 5A$ , $t_p = 8/20\mu s$ , I/O Pin to GND			15	V
Clamping Voltage	$V_C$	$I_{PP} = 25A$ , $t_p = 8/20\mu s$ , I/O Pin to GND			20	V
Junction Capacitance	$C_J$	$V_R = 0V$ , $f = 1MHz$ , I/O Pin to GND		4		pF
Junction Capacitance	$C_J$	$V_R = 0V$ , $f = 1MHz$ , Between I/O Pins		2	4	pF

## Curve Characteristics

Fig. 1 - 8 X 20 $\mu$ s Pulse Waveform

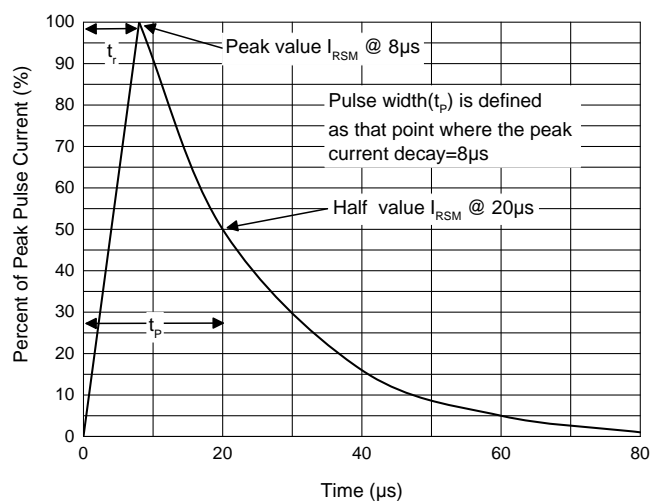


Fig. 2 - Pulse Derating Curve

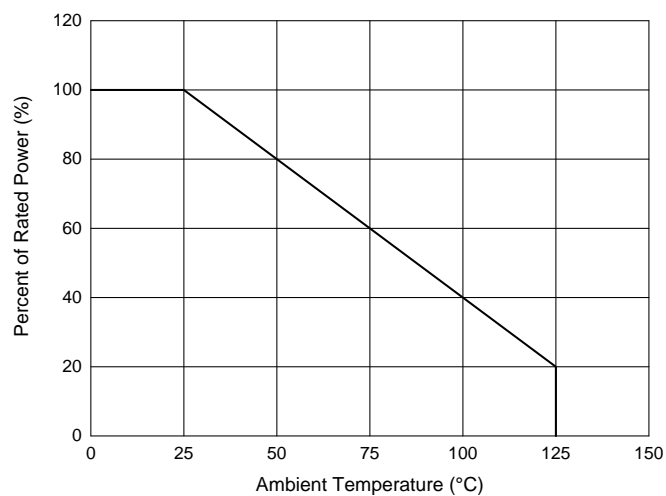
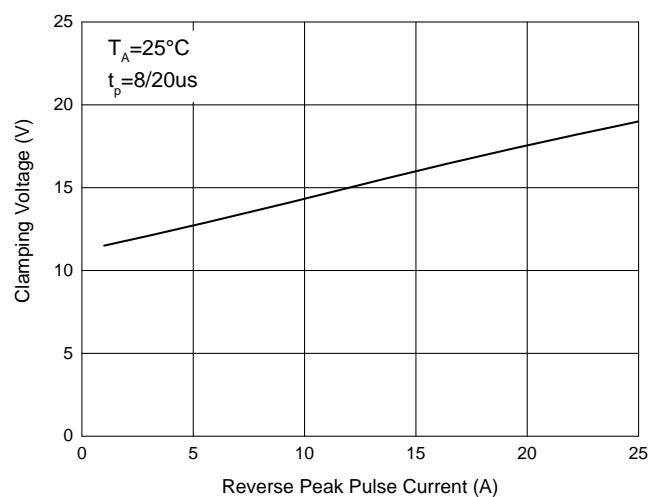


Fig. 3 - Clamping Voltage Characteristics



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" Suffix for Halogen Free, eg. Part Number-TP-HF

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