

### **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)

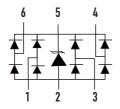
# **Maximum Ratings**

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

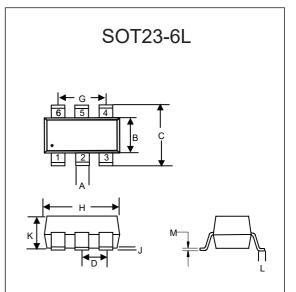
MCC Part Number	Device Marking		
PSRV05-4	V05		

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)	$P_{PK}$	500W

### **Internal Structure**



# ESD Protection Device



DIMENSIONS						
DIM		HES	MM		NOTE	
DIIVI	MIN	MAX	MIN	MAX	NOTE	
Α	0.012	0.020	0.30	0.50		
В	0.051	0.070	1.30	1.80		
С	0.087	0.126	2.20	3.20		
D	0.037		0.95		TYP.	
G	0.0	)74	1.	90	TYP.	
Н	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		
М	0.003	0.008	0.08	0.22		

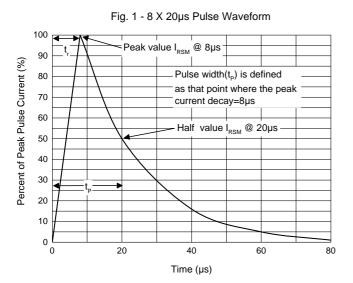


# Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Conditions	Min.	Тур.	Max.	Units
Reverse Working Voltage	$V_{RWM}$				5	V
Reverse Breakdown Voltage	$V_{BR}$	I <sub>T</sub> = 1mA, Pin 5 to Pin 2	6			V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> =5V			1	μA
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> =1A, t <sub>P</sub> =8/20μs, I/O Pin to GND			12.5	V
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> =5A, t <sub>P</sub> =8/20μs, I/O Pin to GND			15	V
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> =25A, t <sub>P</sub> =8/20μs, I/O Pin to GND			20	V
Junction Capacitance	CJ	$V_R = 0V$ , $f = 1MHz$ , I/O Pin to GND		4		pF
Junction Capacitance	CJ	V <sub>R</sub> = 0V, f = 1MHz, Between I/O Pins		2	4	pF



# **Curve Characteristics**



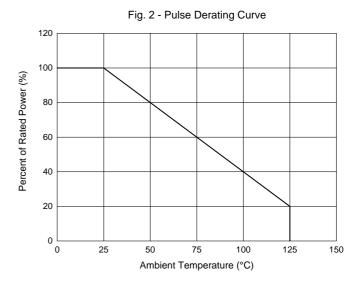
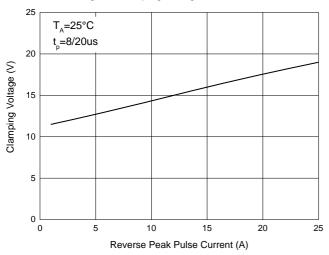


Fig. 3 - Clamping Voltage Characteristics





# **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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