

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)

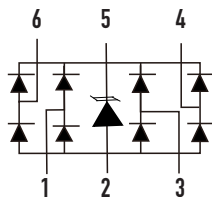
Maximum Ratings

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

| | |
|-----------------|----------------|
| MCC Part Number | Device Marking |
| SRV05-4A | SV05 |

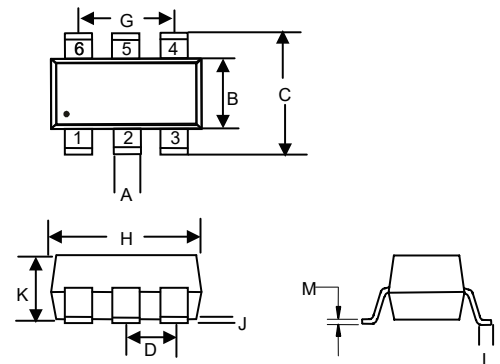
| | | |
|----------------------------|-----------------|---------------|
| IEC61000-4-2(ESD) | Air Contact | ±15KV ±8KV |
| IEC61000-4-4 (EFT) @5/50ns | | 40A |
| Peak Pulse Current(8/20µs) | I _{PP} | 12A |
| Peak Pulse Power (8/20us) | P _{PK} | 300W |

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 | $V_{RWM} = 5V$ | | | 5 | μA |
| 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 | | | 17.5 | V |
| Clamping Voltage | V_C | $I_{PP} = 12A$, $t_p = 8/20\mu s$, I/O Pin to GND | | | 25 | V |
| Junction Capacitance | C_J | $V_R = 0V$, $f = 1MHz$, I/O Pin to GND | | 3 | 5 | pF |
| Junction Capacitance | C_J | $V_R = 0V$, $f = 1MHz$, Between I/O Pins | | 1.5 | | pF |

Curve Characteristics

Fig. 1 - 8 X 20 μ s Pulse Waveform

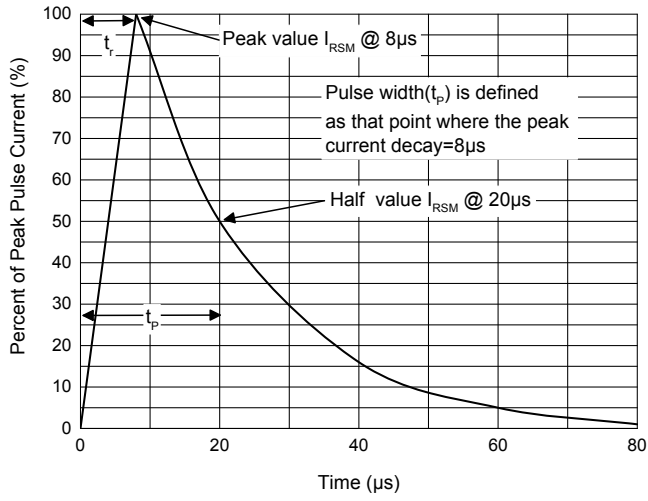


Fig. 2 - Pulse Derating Curve

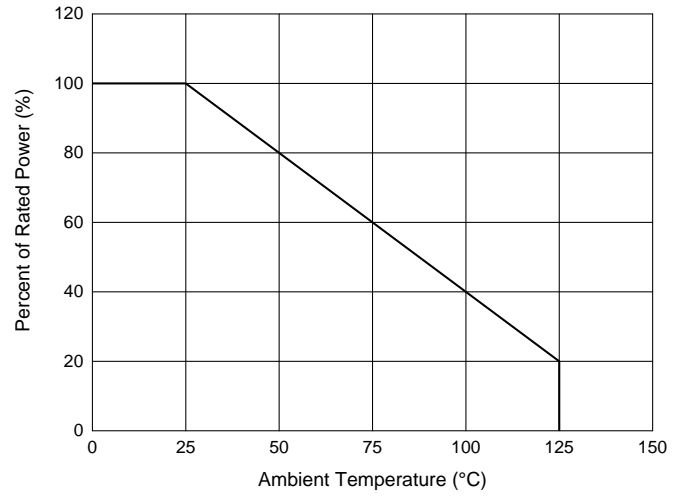
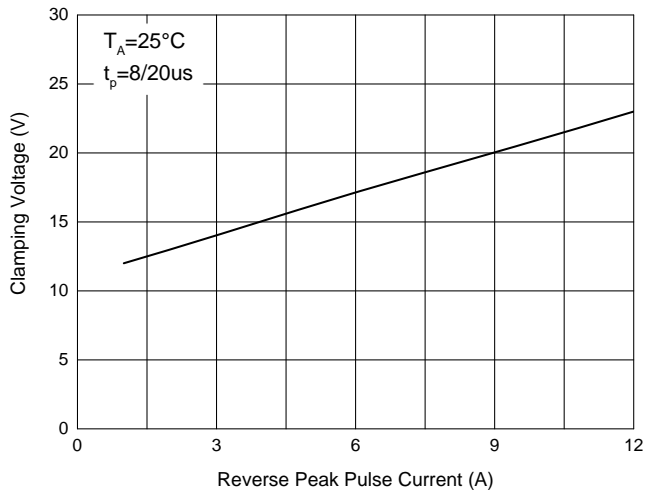


Fig. 3 - Clamping Voltage Characteristics



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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