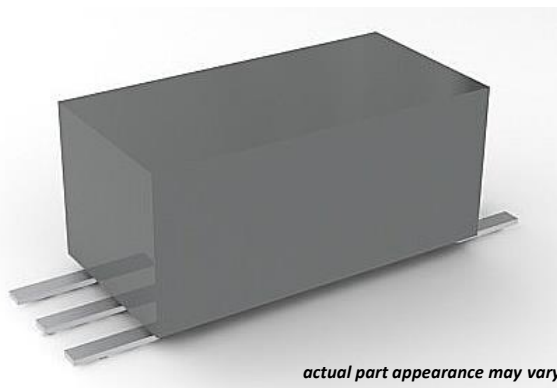


TECHNICAL DATA  
PART NUMBER: SCP-5282-6A/B, Rev. C.1

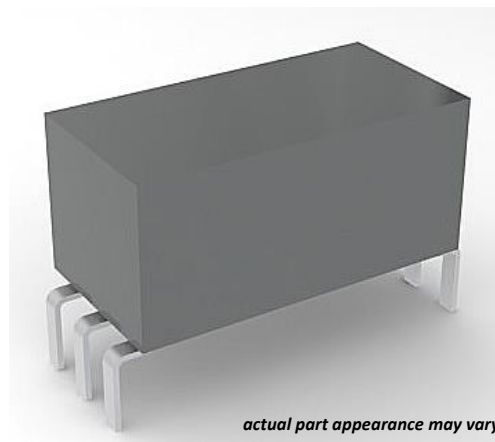
## High Power Bipolar TVS Module (137KW) for Load Dump & Lightning Strike Protection

### Application:

- Lightning strike protection
- 28V system bus protection
- 100% tested to MIL-STD-1275 Pulse
- 100% tested to 50/500  $\mu$ s, 1600A Pulse
- High power dissipation and bi-directional capability
- Surface mount and thru hole packages



SCP-5282-6A



SCP-5282-6B

### Electrical Characteristics:

$T_j = 25^\circ\text{C}$  unless otherwise specified

PARAMETER		SYMBOL	MIN	TYP	MAX	UNIT
Peak Pulse Power	50/500 $\mu$ s waveform	$P_{PPM}$	-	137	-	KW
Peak Pulse Current	50/500 $\mu$ s waveform	$I_{PPM}$	1600	-	-	A
Clamp Voltage @ $I_{PPM}$	50/500 $\mu$ s waveform	$V_{CL}^1$	-	86	90	V
Peak Pulse Power	MIL-STD-1275 waveform	$P_{PPM}$	-	4	-	KW
Peak Pulse Current	MIL-STD-1275 waveform	$I_{PPM}$	54	-	-	A
Clamp Voltage @ $I_{PPM}$	MIL-STD-1275 waveform	$V_{CL}$	-	73	77	V
Reverse Standoff Voltage		$V_{RWM}$	52	-	-	V
Reverse Leakage Current @ $V_{RWM}$		$I_R$	-	-	30	$\mu$ A
Breakdown Voltage @ $I_T = 5\text{mA}$		$V_{BR}$	60	64	-	V

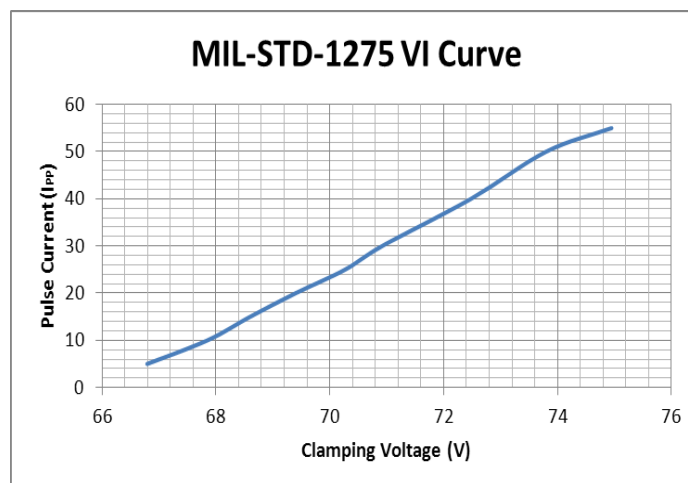
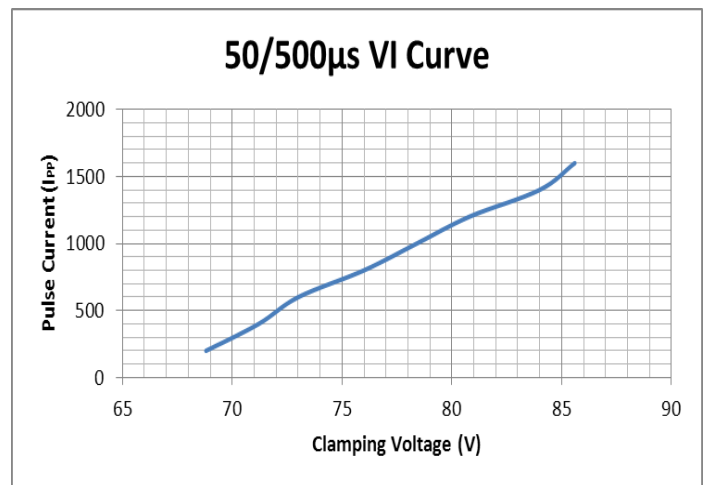
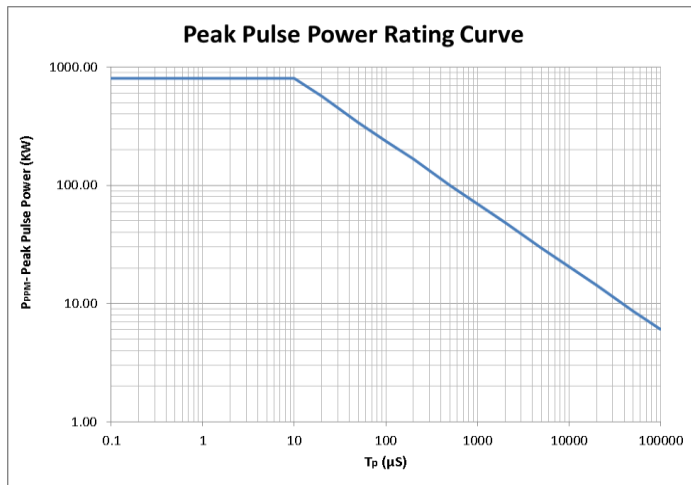
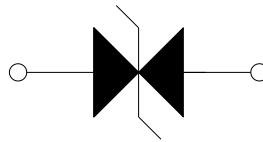
**Note 1: Clamp Voltage production test is limited to 1400A, due to equipment limitation.**

**TECHNICAL DATA**  
**PART NUMBER: SCP-5282-6A/B, Rev. C.1**

**Package Characteristics**

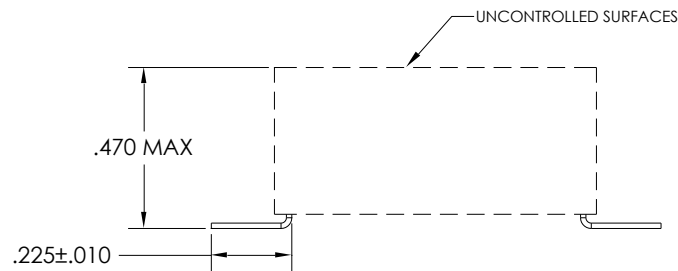
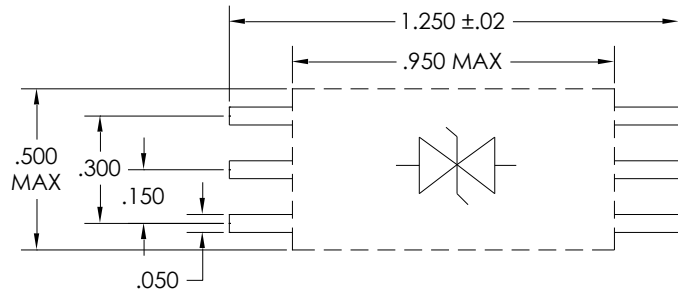
Recommended Operating Temperature Range	T <sub>OP</sub>	- 40	-	85	°C
Junction Temperature Range	T <sub>J</sub>	-40	-	150	°C
Storage Temperature Range	T <sub>S</sub>	- 55	-	150	°C
Module Weight	M	-	20	-	gms

**Electrical Schematic**

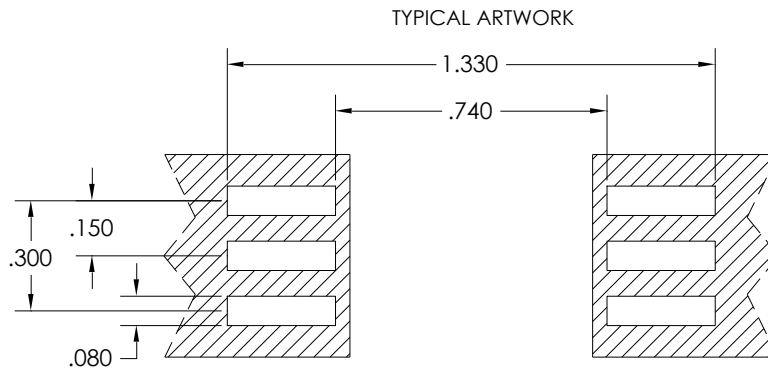


TECHNICAL DATA  
PART NUMBER: SCP-5282-6A/B, Rev. C.1

**Mechanical Drawing SCP-5282-6A**



TOLERANCE = .005 UNLESS OTHERWISE NOTED

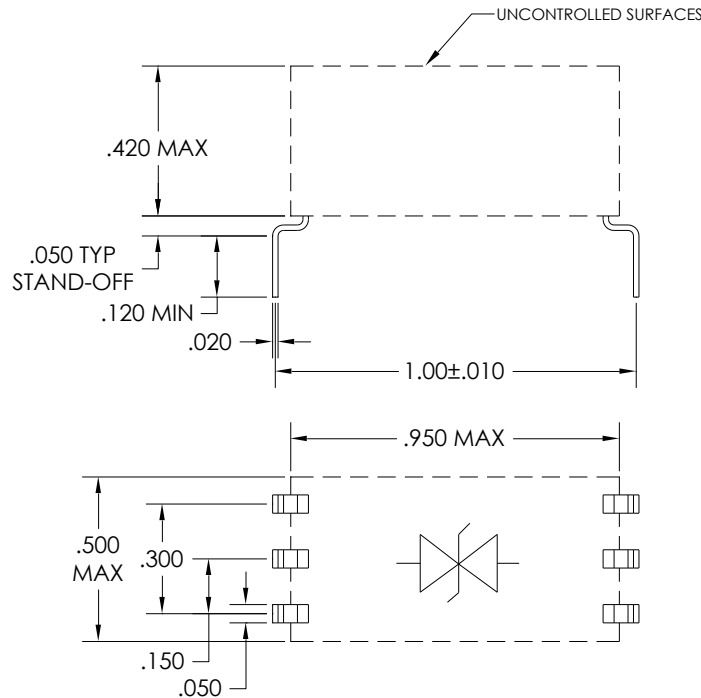


**Soldering note:**

Part has high heat capacity. Solder reflow profile may require longer soak times and/or higher temperatures to achieve proper reflow.

TECHNICAL DATA  
PART NUMBER: SCP-5282-6A/B, Rev. C.1

## Mechanical Drawing SCP-5282-6B



### Soldering note:

Part has high heat capacity and may need to be pre-warmed prior to solder iron or wave solder reflow to achieve proper reflow.

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