



SuperClamp TVS High Power Precision Protection

The Sensitron Advantage

- ✓ Proven solutions for tough requirements
- ✓ 100% production test to worst case waveforms, 50ms/80ms/100ms/150ms
- ✓ Capability to customize package or electrical spec
- ✓ Proven heritage on commercial, military & space programs

SuperClamp TVS, SCP-5282-4, SCP-5282-9, SCP-5282-36/A

- Handles high energy dump, 120A for 100ms or 100A for 50ms
- Clamps to under 33V at 100A, under 32V at 50A, under 34 at 12mA
- Clamping is independent of temperature
- Narrow window between breakdown voltage and clamping voltage
- Designed to enforce safe paralleling
- Space saving busbar connections
- 100% tested to single pulse of 120A for 100ms
- 100% tested to five pulses @10 sec intervals of 100A for 50ms

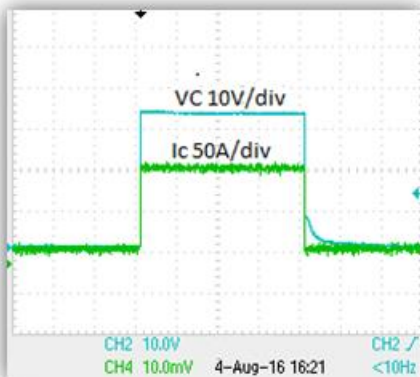


Dimensions (in): 1.85 x 3.20 x 0.82
Dimensions (cm): 46.99 x 81.28 x 20.83
Weight: 115 gm/4.06 oz
Part Number: SCP-5282-4, -9, -36/A

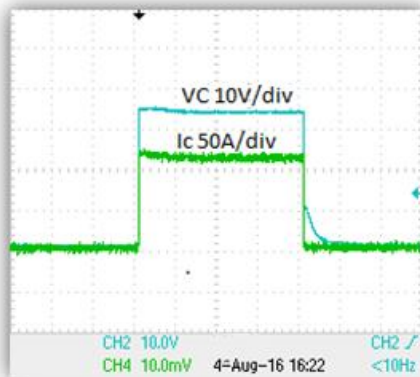
SuperClamp, SCP-5282-4, 9, -36/A / SECP-5282-4, -9

PN	Configuration	Peak Pwr 1ms	V _{WM} Max	I _D Max @Typ V _{WM}	I _{PPM}	V _{CLAMP} @ I _{PPM} Max	100% Tested To:
SCP-5282-4	Uni	10kW	33V	10mA	120A	37.50V	120A/100ms
SCP-5282-9	Uni	10kW	30V	10mA	120A	33.50V	120A/100ms
SCP-5282-36/A	Uni/Uni w/ reverse polarity	10kW	34V	12mA	100A	39.00V	100A/50ms
SECP-5282-4	IP67 Enclosure	300A	33V	50mA	300A	37.20V	-
SECP-5282-9	IP67 Enclosure	300A	30V	50mA	300A	33.20V	-

Clamping Current and Voltage Waveforms



@ I_c=100A



@ I_c=120A



Dimensions (in): 7.87 x 3.94 x 2.50
Dimensions (cm): 19.99 x 10.00 x 6.35
Part Number: SECP-5282-4, -9

High Power Protection
(MIL-STD-1275)

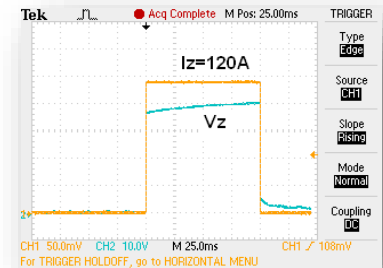


High Power Transient Surge Protection Vehicle Power Surge Protection

MIL-STD-1275 Compliant Transorb 28V Protection, SCP-5282-x Series

- 28V power system voltage transient protection including load dump
- Clamping below 50V DC for both 100V and 250V pulse
- Power savings by allowing lower power supply voltage ratings to be used
- Screw terminals, isolated base plate for mounting to chassis

Clamping Current and Voltage Waveforms, V_z max=40.7V, for SCP-5282-5A



Transorbs, SCP-5282-x Series

PN	Config	Peak Pwr 1ms	V_{WM} , Min	I_D Max @Typ V_{WM}	V_{BR} , Min	I_{PPM}	V_{CLAMP} @ I_{PPM} Max	100% Tested To:
SCP-5282-1	Bi	60kW	33V	25uA	36.7V	100A	49V	100A/80ms square
SCP-5282-1U	Uni	60kW	33V	25uA	36.7V	100A	49V	100A/80ms square
SCP-5282-2	Bi	60kW	33V	25uA	36.7V	100A	49V	5x 100A, 50ms sq
SCP-5282-3	Bi	100kW	33V	40uA	36.7V	135A	49V	5x 110A, 50ms sq
SCP-5282-5/A	Uni	50kW	33V	30mA	36.7V	120A	43V/ 42V	120A/100ms, 50/500us
SCP-5282-6A/B	Bi	65kW	52V	30uA	60V	54A	77V	1275 waveform
SCP-5282-10A/B	Bi/Uni	90kW	34V	30uA	40V	82A	55V	50/500µs



Dimensions (in): 1.24 x 2.25 x 0.61
Dimensions(cm): 31.50 x 57.15 x 15.49
Weight: 72 gm/ 2.54 oz
Part Number: SCP-5282-1, -1U, -2



Dimensions (in): 2.02 x 2.25 x 0.61
Dimensions(cm): 51.31 x 57.15 x 15.49
Weight: 122 gm/ 4.30 oz
Part Number: SCP-5282-3



Dimensions (in): 0.95 x 0.50 x 0.47
Dimensions(cm): 24.13 x 12.70 x 11.94
Weight: 20 gm/ .71 oz
Part Number: SCP-5282-6A/B, -10A/B

New Design! MIL-STD-1275 Compliant Transorb 28V Protection, SCP-5282-180-xxx

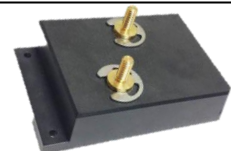
- Designed to meet MIL-STD-1399 voltage spike requirements for 115V systems
- Protects against MIL-STD-704 Voltage Transients
- Clamps below 290V at I_{pp} for 10/1000µs pulse



Dimensions (in): 1.59 x 2.06 x 0.60
Dimensions(cm): 4.04 x 5.23 x 1.52
Part Number: SCP-5282-180-xxx

SAE Compliant Transorb 12V Protection for Military Vehicles, SAE-5282-12

- High pulse power transorb for +12 Vdc systems
- Clamping below 32Vdc for 100V pulse /142A peak current
- SAE J1113-11 compliant; 100V surge withstanding with 0.5 Ohm source impedance, 400 msec pulse
- Allows the use of 40V high efficiency FET
- Screw terminals, isolated base plate for mounting to chassis



Dimensions (in): 1.85 x 3.20 x 0.82
Dimensions(cm): 46.99 x 81.28 x 20.83
Weight: 115 gm/ 4.06 oz
Part Number: SAE-5282-12, SCP-5282-5/A

Transorb, SAE-5282-12

PN	Config	Peak Pwr	V_{WM} Min	Leakage Max V_{WM}	V_{BR} Min	I_{PPM}	V_{CLAMP} @ I_{PPM} Max	100% Tested To:
SAE-5282-12	Uni	4kW/400ms	18V	250 uA	25.1V	142A	32V	J1113-11, 142A/400ms

High Power Protection (MIL-STD-1275)