# **SENSITRON PRODUCT OVERVIEW**

**Transient Voltage Suppressors** 

Standard	Clamp Levels	Spec Levels	Part Number(s)
DO-160	1600A, 500uS, up to 200kW Pk Pwr	Level 3, 4, 5, Wave 5A, 5B	LSP Series, SCP-5282-6A/B, -10A/B
MIL-STD-1275	135A/130ms, up to 100kW/1ms	28V System Protection	SCP-5282-x Series
MIL-STD-1275	120A/100ms, clamp to < 38V	28V System Protection	SCP-5282-4, SCP-5282-9 SuperClamp
SAE J1113-11	$100 \text{V}/0.5 \Omega$ to $400 \text{ms}, 174 \text{V}/2 \Omega$ to $150 \text{ms}$	Conducted Immunity	SAE-5282-12, SCP5282-3, SCP-5282-5/A, SCP-5282-9
ISO16750-2	$151\text{V}/1\Omega$ to $350\text{ms};$ ISO-7637 200V 3B	Load Dump, Inductive Switching	SCP-5282-3

#### **Motor Drive Solutions**

Features/Options	Power Bridge	Smart Drive	Motor Controller	Complete Drive Assembly
Function	3ph & H-Bridge FET, IGBT, SiC Modules	Pwr Bridge w/ Drivers, Sense/Protection	Closed loop speed, torque, sensorless control, FOC	Controller + EMI & Input filters, bias supplies, option for enclosure
Voltage Range	600V to 1200V	100V to 1200V	100V to 1200V	50V to 600V
Current Range	15A to 1000A	20A to 200A	15A to 150A	40A to 100A
Protection	External	OCP,OTP,De-sat,Shoot-thru,OVP	OCP,OTP,De-sat,Shoot-thru,OVP	OCP,OTP,De-sat,Shoot-thru,OVP
I/O	External	Isolation, EN, Imon, Temp, Faults	Isolation EN, Imon, Temp, Faults, Speed Out, Vbus	Isolated, EN, Imon, Temp, Faults, Speed Out, Vbus
Features	Thermistor, Brake, 3ph Rectifier	Fault Protection, Thermistor, Brake	GUI, Quick-tune, Fault Protection, Thermistor, Brake	GUI, Quick-tune, DO-160/461 Compliant, Fault Protection
Temp Range	-65°C to 175°C	-40/-55°C to 150°C	-55°C to 175°C	-40/-55°C to 85°C
Part Number(s)	SPM1xxx,SCP-5115i	SPM6XXXX-XXXD, -H, SPGXXX	SMCX Series	SECX Series

**Solid State Power Management** 

Description	Single Ch.	2Ch, 4 Ch	16 Ch	32 Ch
Voltage, max	28 – 375VDC	90VDC	90VDC	90VDC
Current	0.5 to 150 A	2x200A,4x 100A	8x5A, 3x15A, 5x25A	8x8A, 12x7A, 12x6A,32x10A
Reports	Status	Ch I,V, Temp	Ch I,V, Temp	Ch I,V, Temp
Interface	Discrete	CAN	CAN	CAN
Features	Programmable, I <sup>2</sup> t, EN, Isolation control & I/O	Programmable, I <sup>2</sup> t, Battle Short, Isolation control & I/O	Programmable, I <sup>2</sup> t, Battle Short, Isolation control & I/O	Programmable, I <sup>2</sup> t, Battle Short, Isolation control & I/O
Temp Range	-40°C to 85°C	-55°C to 100°C	-45°C to 100°C	-40°C to 100°C
Part Number(s)	SPDP, SRPC Series	SPDF02Cxx, SPDF04Cxx	SPDM16 Series SEDM16 Series	SPDM32CX0X SEDM32CX0X

# **QPL Products: JANS & JANTXV Diodes**

- General Purpose, Fast, Ultrafast Rectifier Die: 50V to 600V, 1A to 70A, 25ns to 3000ns
- TVS: Broad voltage range, broad spectrum transient suppression, 500W & 1500W surge
- Zener: 6.2V to 390V, 500mW to 5W, 5% tolerance for Vz. Lower voltages in development
- Schottky: Soft reverse recovery, 15V to 200V, Small Signal Switching: 70V to 150V, up to 0.3A

## **High Reliability/Hermetic Discretes**

- Rectifiers: Schottky up to 200V, Silicon Carbide up to 1200V
- PowerPak Diopaks: Up to 1200V, 100A
- Discrete MOSFETs: Up to 1000V, Discrete IGBTs: Up to 1200V
- 3-Phase, 1-Phase Bridges: Up to 1000V
- HV Diode Strings/ Bridge Stacks: up to 20kV, 10GΩ isolation to base

### **Custom Power Solutions**

- · Near hermetic packaging for harsh environment applications
- Integrated heatsink and thermal conduction packaging
- Advanced lightweight packaging technology
- Superior thermal management & high power density/circuit area ratio
- Sophisticated advanced simulation and modeling tools



**About Sensitron:** Sensitron has over 50 years of heritage as a leading manufacturer of high-reliability power electronic component solutions for the Defense, Aerospace, Space, and Medical markets. Our products provide rugged, light-weight, and cost effective solutions for switching power supplies, AC-DC rectification, primary & secondary power distribution, motion control, transient voltage spike protection, and custom applications.