



# CHENMKO ENTERPRISE CO.,LTD

Lead free devices

## SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 - 60 Volts CURRENT 4.0 Ampere

SPL420CTPT

THRU

SPL460CTPT

PROVISIONAL SPEC.

### APPLICATION

- \* DC to DC Converters
- \* Switch- Mode Power Supplies
- \* Notebook PC

### FEATURE

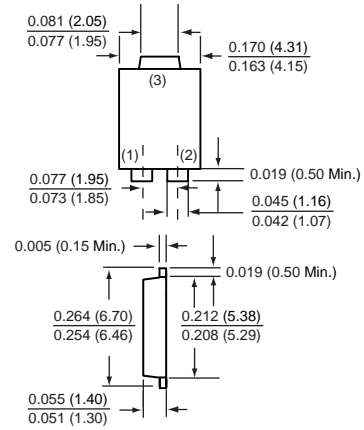
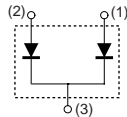
- \* Small Surface Mounting Type. (SMP)
- \* Low Power Loss, High Efficiency
- \* Low Forward Voltage Drop
- \* Peak Forward Surge Current Is 50A.
- \* Schottky Diode Array

### WEIGHT

### MARKING

SMP

### CIRCUIT



Dimensions in inches and (millimeters)

SMP

### MAXIMUM RATINGS ( At TA = 25°C unless otherwise noted )

RATINGS	SYMBOL	SPL420CTPT	SPL430CTPT	SPL440CTPT	SPL450CTPT	SPL460CTPT	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	Volts
Maximum Average Forward Rectified Current	I <sub>O</sub>	4.0					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	50					Amps
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	210					pF
Typical Thermal Resistance (Note 1)	R <sub>θJL</sub>	17					°C / W
Operating Temperature Range	T <sub>J</sub>	-65 to +125					°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150					°C

### ELECTRICAL CHARACTERISTICS ( At TA = 25°C unless otherwise noted )

CHARACTERISTICS	SYMBOL	SPL420CTPT	SPL430CTPT	SPL440CTPT	SPL450CTPT	SPL460CTPT	UNITS
Maximum Instantaneous Forward Voltage at 2.0 A DC	V <sub>F</sub>	0.55			0.70		Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@ TA = 25°C	0.5					mAmps
	@ TA = 100°C	10					mAmps

NOTES : 1. Thermal Resistance ( Junction to Lead ) : PC Board Mounted on 0.2 X 0.2" ( 5 X 5mm ) copper pad area.  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts.

2004-8

# RATING CHARACTERISTIC CURVES ( SPL420CTPT THRU SPL460CTPT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

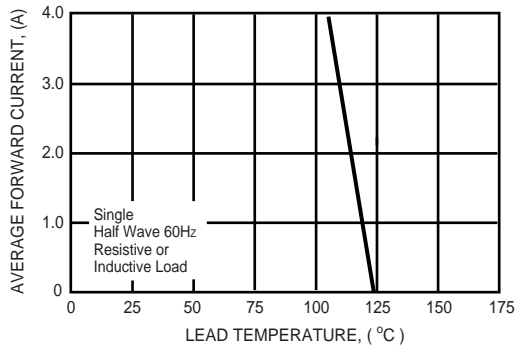


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

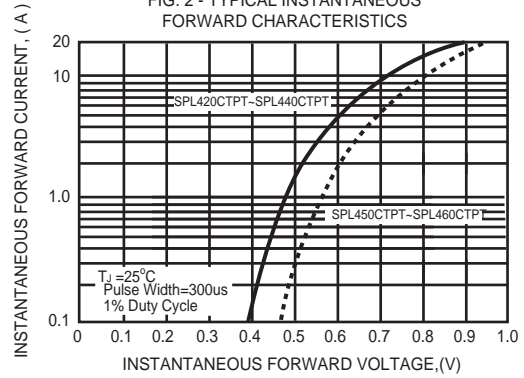


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

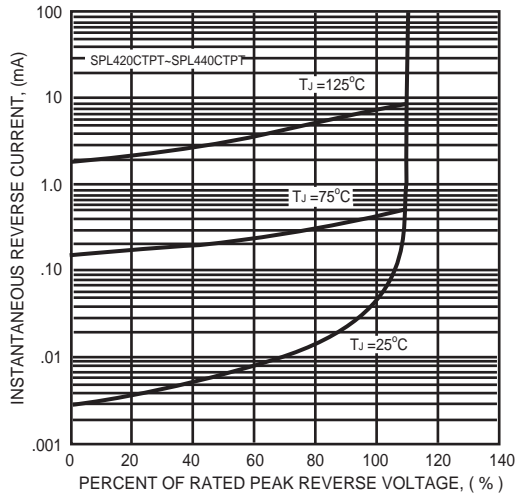


FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

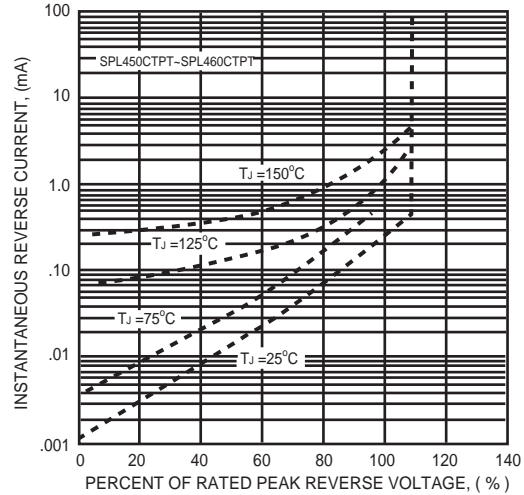


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

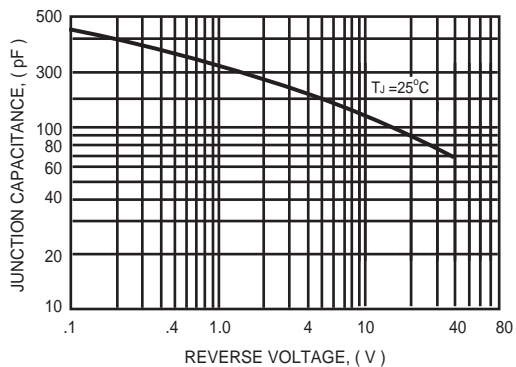


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

