



# CHENMKO ENTERPRISE CO.,LTD

## SURFACE MOUNT

### SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 70 - 100 Volts CURRENT 2.0 Ampere

Lead free devices

SPL270CTPT  
THRU  
SPL2100CTPT

PROVISIONAL SPEC.

#### APPLICATION

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

#### FEATURE

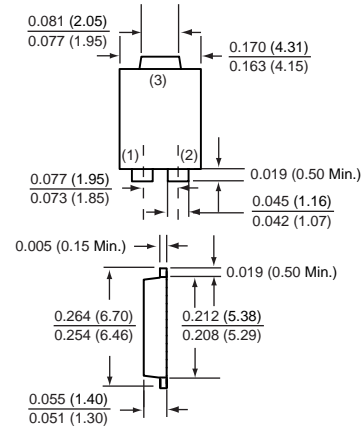
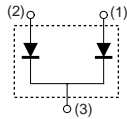
- \* Small Surface Mounting Type. (SMP)
- \* Low Power Loss, High Efficiency .
- \* Low Forward Voltage Drop .
- \* Peak Forward Surge Current Is 40A.
- \* Schottky Diode Array .

#### WEIGHT

#### MARKING

SMP

#### CIRCUIT



SMP

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

RATINGS	SYMBOL	SPL270CTPT	SPL280CTPT	SPL290CTPT	SPL2100CTPT	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	70	80	90	100	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	49	56	63	70	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	70	80	90	100	Volts
Maximum Average Forward Rectified Current	I <sub>O</sub>	2.0				Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	40				Amps
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	110				pF
Typical Thermal Resistance (Note 1)	R <sub>θJA</sub>	50				°C / W
Operating and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-65 to +125				°C

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

CHARACTERISTICS	SYMBOL	SPL270CTPT	SPL280CTPT	SPL290CTPT	SPL2100CTPT	UNITS
Maximum Instantaneous Forward Voltage at 1.0 A DC	V <sub>F</sub>	0.75		0.80		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 0.2X0.2" ( 5mm X 5mm ) copper pad area.  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts.

2004-8

# RATING CHARACTERISTIC CURVES ( SPL270CTPT THRU SPL2100CTPT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

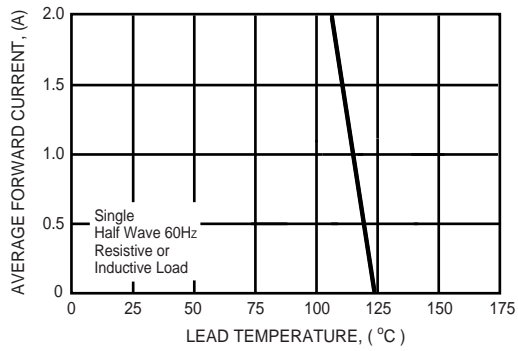


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

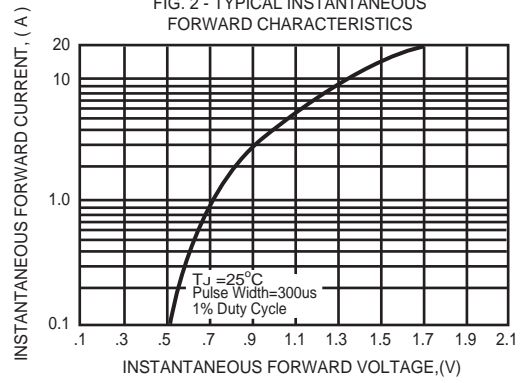


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

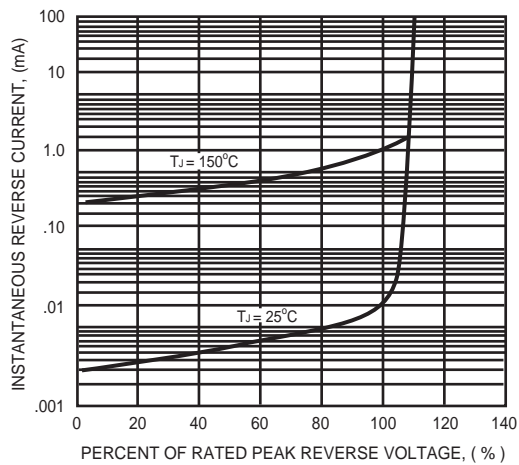


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

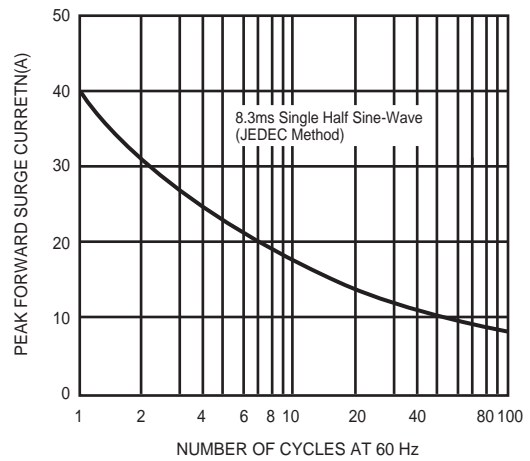


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

