



# CHENMKO ENTERPRISE CO.,LTD

Lead free devices

## SURFACE MOUNT

### SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 70 - 100 Volts CURRENT 10 Amperes

SPL1070CTPT

THRU

SPL10100CTPT

PROVISIONAL SPEC.

#### APPLICATION

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

#### FEATURE

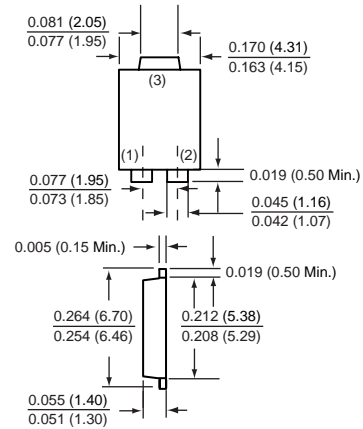
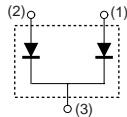
- \* Small Surface Mounting Type. (SMP)
- \* Low Power Loss, High Efficiency
- \* Low Forward Voltage Drop
- \* Peak Forward Surge Current Is 100A.
- \* Schottky Diode Array

#### WEIGHT

#### MARKING

SMP

#### CIRCUIT



Dimensions in inches and (millimeters)

SMP

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

RATINGS	SYMBOL	SPL1070CTPT	SPL1080CTPT	SPL1090CTPT	SPL10100CTPT	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 at TL (SEE FIG.1)(Note 3)	I <sub>O</sub>	10.0				Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	100				Amps
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	250				pF
Typical Thermal Resistance (Note 3)	R <sub>θJL</sub>	15				°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	SPL1070CTPT	SPL1080CTPT	SPL1090CTPT	SPL10100CTPT	UNITS
Maximum Instantaneous Forward Voltage at 5.0 A DC (Note 1)	V <sub>F</sub>	0.75		0.80		Volts
Maximum Average Reverse Current (Note 1) at Rated DC Blocking Voltage	@ TA = 25°C	0.5				mAmps
	@ TA = 100°C	20				mAmps

- NOTES : 1. Pulse test : 300 us pulse width, 1% duty cycle  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts  
 3. P.C.B. mounted 0.31 x 0.31" ( 8 x 8mm) copper pad areas

2004-8

# RATING CHARACTERISTIC CURVES ( SPL670CTPT THRU SPL6100CTPT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

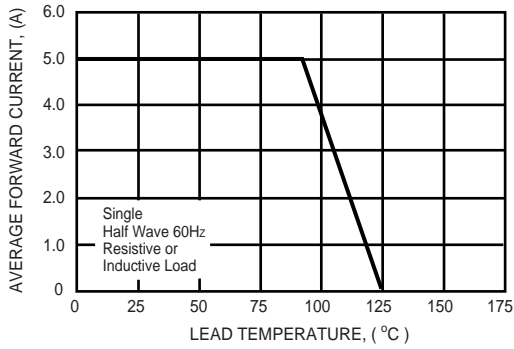


FIG. 2 - INSTANTANEOUS FORWARD CURRENT, (A)

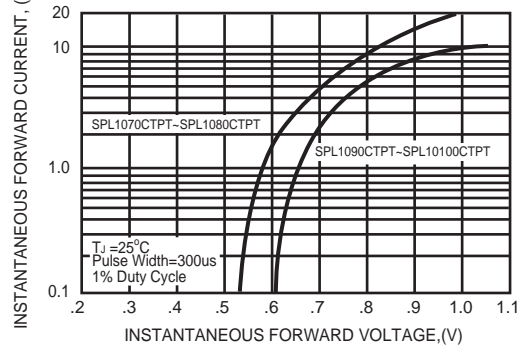


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

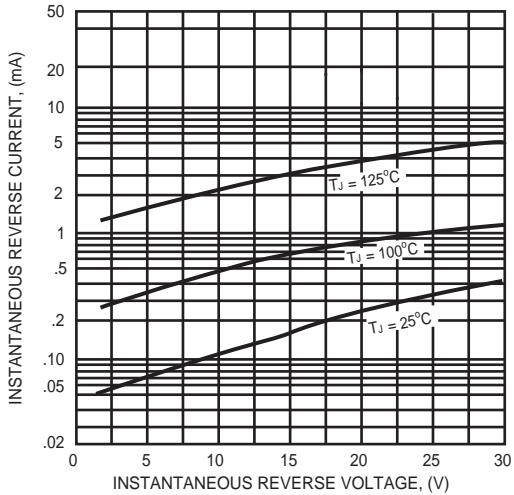


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

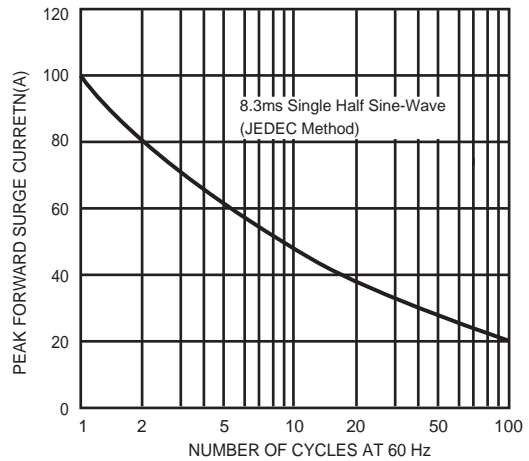


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

