



CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 - 60 Volts CURRENT 10 Amperes

SPL1020CTPT

THRU

SPL1060CTPT

PROVISIONAL SPEC.

Lead free devices

APPLICATION

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

FEATURE

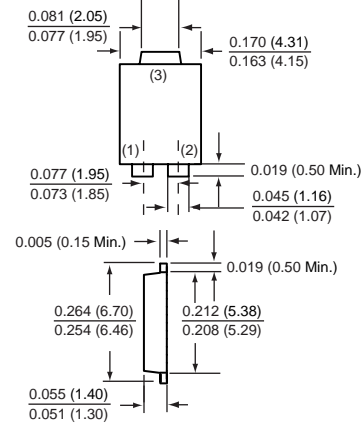
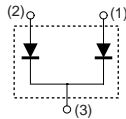
- * Small Surface Mounting Type. (SMP)
- * Low Power Loss, High Efficiency
- * Low Forward Voltage Drop
- * Peak Forward Surge Current Is 100A.
- * Schottky Diode Array

WEIGHT

MARKING

SMP

CIRCUIT



Dimensions in inches and (millimeters)

SMP

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

RATINGS	SYMBOL	SPL1020CTPT	SPL1030CTPT	SPL1040CTPT	SPL1050CTPT	SPL1060CTPT	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	Volts
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	Volts
Maximum Average Forward Rectified Current at TL (SEE FIG.1)(Note 3)	I _O	10					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	100					Amps
Typical Junction Capacitance (Note 2)	C _J	250					pF
Typical Thermal Resistance (Note 3)	R _{θJL}	15					°C / W
Operating Temperature Range	T _J	-65 to +125					°C
Storage Temperature Range	T _{STG}	-65 to +150					°C

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

CHARACTERISTICS	SYMBOL	SPL1020CTPT	SPL1030CTPT	SPL1040CTPT	SPL1050CTPT	SPL1060CTPT	UNITS
Maximum Instantaneous Forward Voltage at 5.0 A DC (Note 1)	V _F	0.55			0.70		Volts
Maximum Average Reverse Current (Note 1) at Rated DC Blocking Voltage	@ TA = 25°C	0.5					mAmps
	@ TA = 100°C	20		10			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 (SPL1020CTPT THRU SPL1060CTPT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

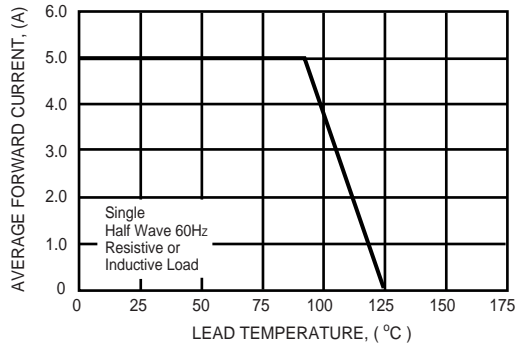


FIG. 2 - INSTANTANEOUS FORWARD CURRENT, (A)

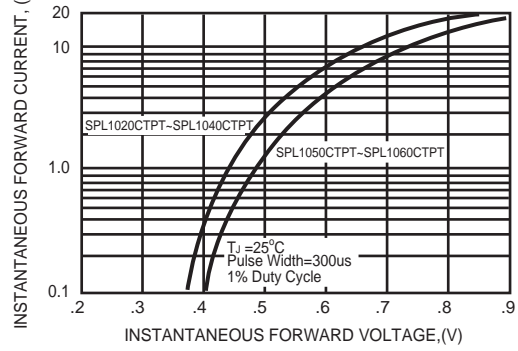


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

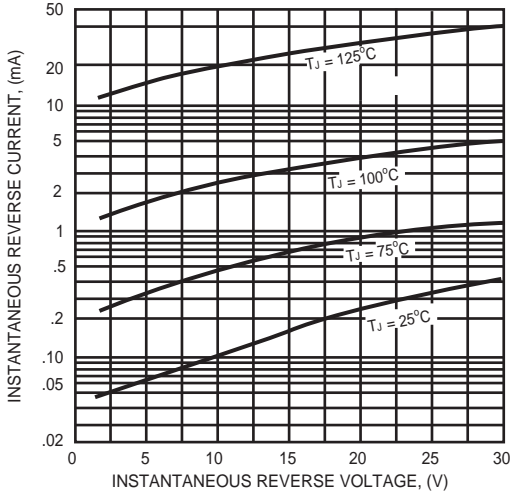


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

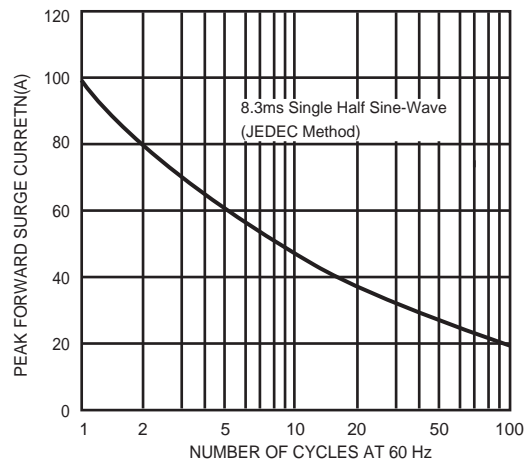


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

