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
* Notbook PC

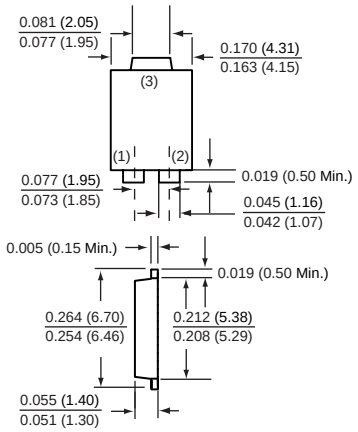
FEATURE

* 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

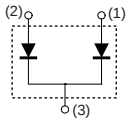
SMP



Dimensions in inches and (millimeters)

SMP

CIRCUIT



MAXIMUM RATINGES (At T_A = 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 T_L (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)	$R_{\theta JL}$	15					°C / W
Operating Temperature Range	T_J	-65 to +125					°C
Storage Temperature Range	T_{STG}	-65 to +150					°C

ELECTRICAL CHARACTERISTICS (At T_A = 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)	@ T_A = 25°C	I_R	0.5					mAmps
at Rated DC Blocking Voltage	@ T_A = 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

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RATING CHARACTERISTIC CURVES (SPL1020CTPT THRU SPL1060CTPT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

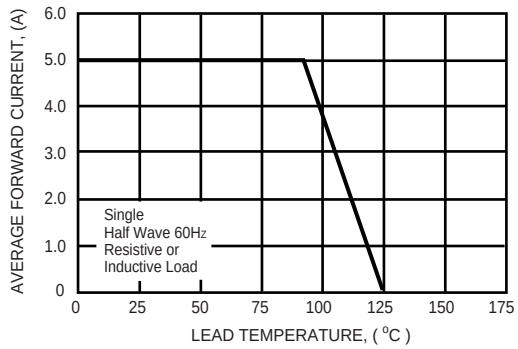

FIG. 2 - INSTANTANEOUS FORWARD CURRENT, (A)

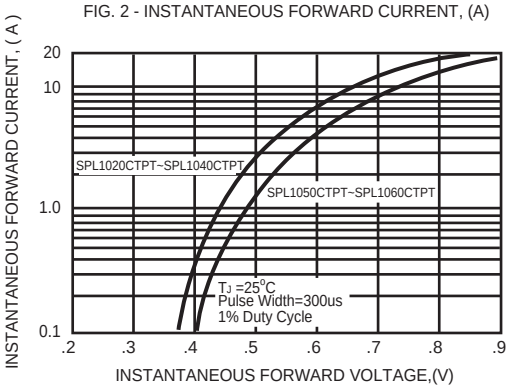

FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

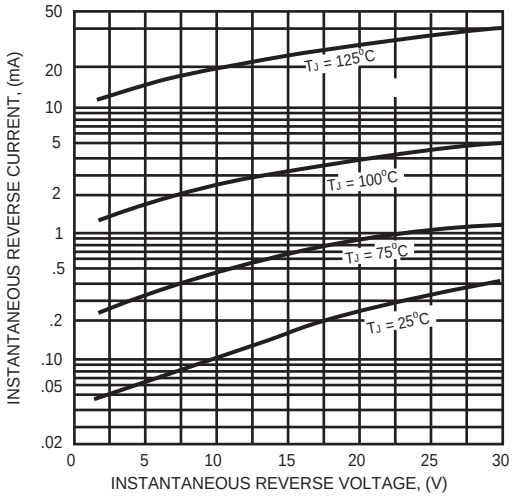

FIG. 4 - MAXIMUM NON-REPETIVE FORWARD SURGE CURRENT

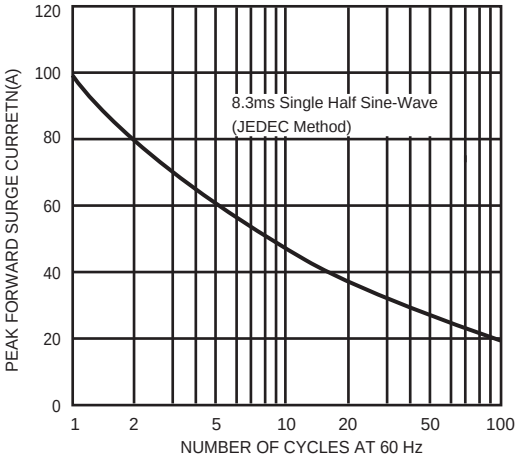

FIG. 5 - TYPICAL JUNCTION CAPACITANCE