CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 - 60 Volts CURRENT 4.0 Ampere

Lead free devices

SPL420CTPT

THRU

SPL460CTPT

PROVISIONAL SPEC.

APPLICATION

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

FEATURE

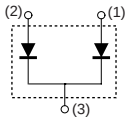
* Small Surface Mounting Type. (SMP)
* Low Power Loss, High Efficiency .
* Low Forward Voltage Drop .
* Peak Forward Surge Current Is 50A.
* Schottky Diode Array .

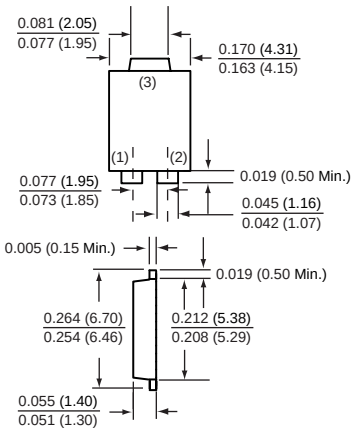
WEIGHT

MARKING

SMP

CIRCUIT





Dimensions in inches and (millimeters)

SMP

MAXIMUM RATINGES (At T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL	SPL420CTPT	SPL430CTPT	SPL440CTPT	SPL450CTPT	SPL460CTPT	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	I_O	4.0					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50					Amps
Typical Junction Capacitance (Note 2)	C_J	210					pF
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$	17					°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	SPL420CTPT	SPL430CTPT	SPL440CTPT	SPL450CTPT	SPL460CTPT	UNITS
Maximum Instantaneous Forward Voltage at 2.0 A DC		V_F	0.55			0.70		Volts
Maximum Average Reverse Current	@ T_A = 25°C	I_R	0.5					mAmps
at Rated DC Blocking Voltage	@ T_A = 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.

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RATING CHARACTERISTIC CURVES (SPL420CTPT THRU SPL460CTPT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

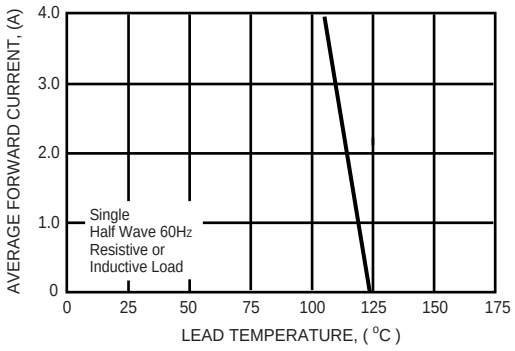

FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

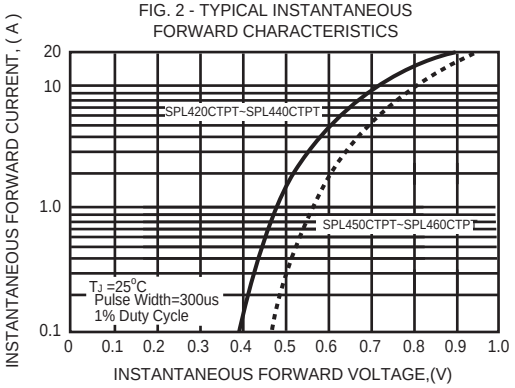

FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

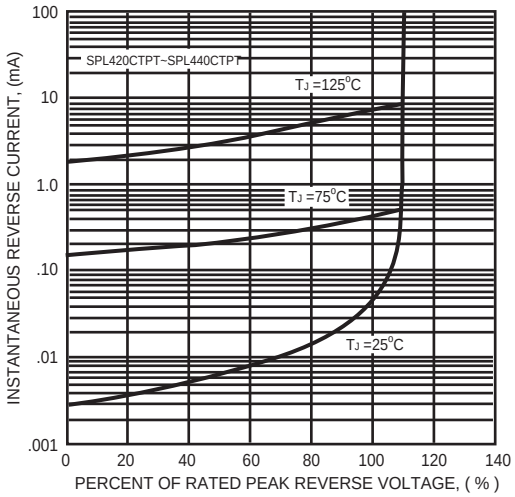

FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

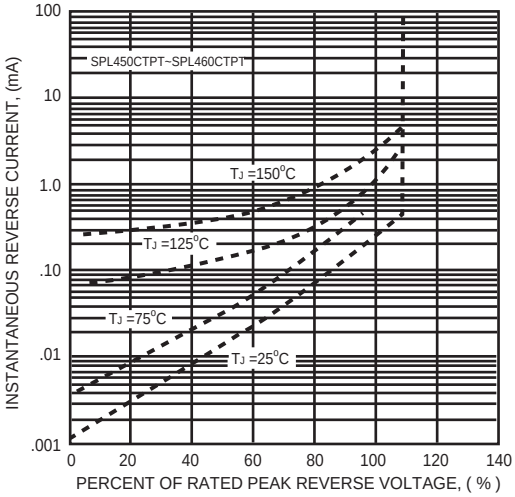

FIG. 4 - TYPICAL JUNCTION CAPACITANCE

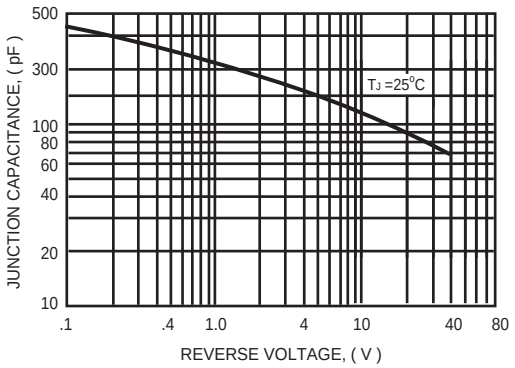

FIG. 5 - MAXIMUM NON-REPETIVE FORWARD SURGE CURRENT