CHENMKO ENTERPRISE CO.,LTD

Lead free devices

SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 70 - 100 Volts CURRENT 6.0 Amperes

SPL670CTPT

THRU

SPL6100CTPT

PROVISIONAL SPEC.

APPLICATION

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

FEATURE

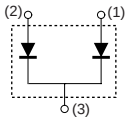
* Small Surface Mounting Type. (SMP)
* Low Power Loss, High Efficiency .
* Low Forward Voltage Drop .
* Peak Forward Surge Current Is 80A.
* Schottky Diode Array .

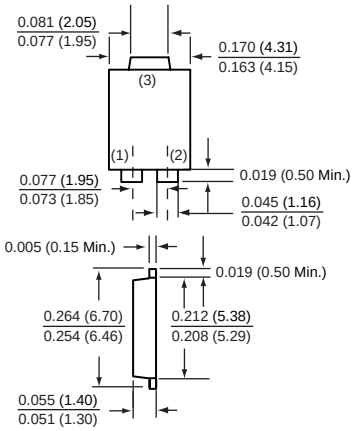
WEIGHT

MARKING

SMP

CIRCUIT





Dimensions in inches and (millimeters)

SMP

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

RATINGS	SYMBOL	SPL670CTPT	SPL680CTPT	SPL690CTPT	SPL6100CTPT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	70	80	90	100	Volts
Maximum RMS Voltage	V_{RMS}	49	56	63	70	Volts
Maximum DC Blocking Voltage	V_{DC}	70	80	90	100	Volts
Maximum Average Forward Rectified Current at T_L (SEE FIG.1)(Note 3)	I_O	6.0				Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80				Amps
Typical Junction Capacitance (Note 2)	C_J	250				pF
Typical Thermal Resistance (Note 3)	$R_{\theta JL}$	15				°C / W
Operating and Storage Temperature Range	T_J,T_{STG}	-65 to +125				°C

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

CHARACTERISTICS		SYMBOL	SPL670CTPT	SPL680CTPT	SPL690CTPT	SPL6100CTPT	UNITS
Maximum Instantaneous Forward Voltage at 3.0 A DC (Note 1)		V_F	0.75		0.80		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				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)

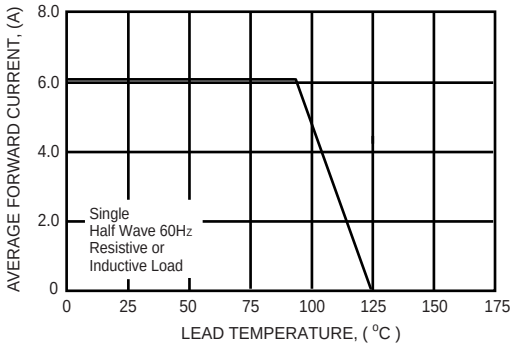


FIG. 2 - INSTANTANEOUS FORWARD CURRENT, (A)

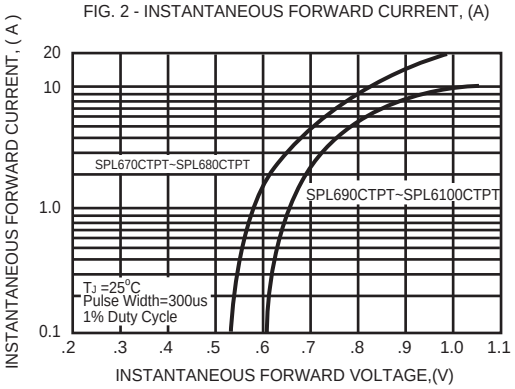


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

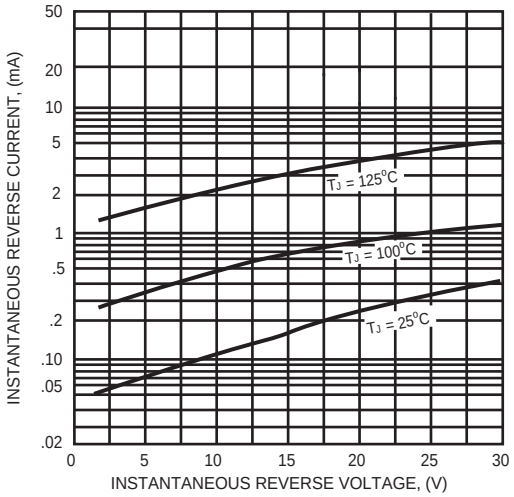


FIG. 4 - MAXIMUM NON-REPETIVE FORWARD SURGE CURRENT

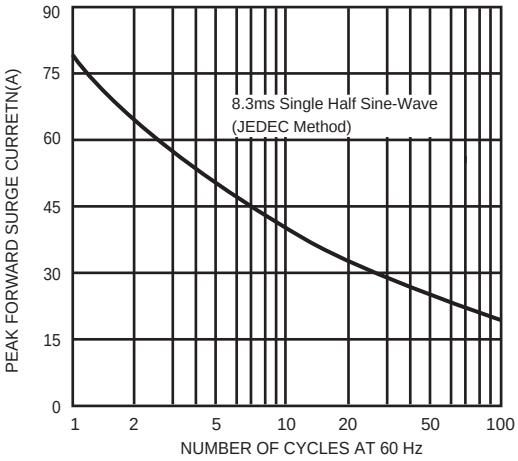


FIG. 5 - TYPICAL JUNCTION CAPACITANCE