CHENMKO ENTERPRISE CO.,LTD

Lead free devices

SURFACE MOUNT
SCHOTTKY BARRIER RECTIFIER
VOLTAGE RANGE 60 - 100 Volts CURRENT 5.0 Amperes

SPL560PT
THRU
SPL5100PT

PROVISIONAL SPEC.

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

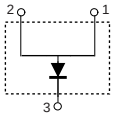
FEATURE
* Small Surface Mounting Type. (SMP)
* High speed (T_{RR}=8.0nSec TYP.)
* Low Power Loss, High Efficiency .
* Low Forward Voltage Drop .
*. Peak Forward Surge Current Is 100A.
* Schottky Diode Array .

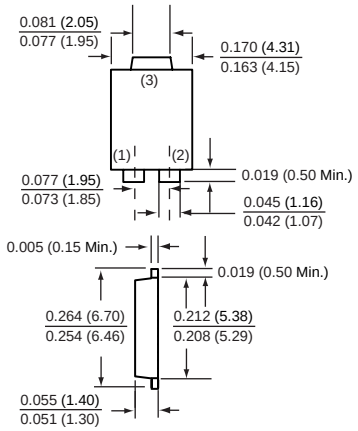
WEIGHT

MARKING

SMP

CIRCUIT





Dimensions in inches and (millimeters)

SMP

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

RATINGS	SYMBOL	SPL560PT	SPL580PT	SPL5100PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	60	80	100	Volts
Maximum RMS Voltage	V_{RMS}	42	56	70	Volts
Maximum DC Blocking Voltage	V_{DC}	60	80	100	Volts
Maximum Average Forward Rectified Current	I_O	5.0			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	SPL560PT	SPL580PT	SPL5100PT	UNITS
Maximum Instantaneous Forward Voltage at 5.0 A DC (Note 1)		V_F	0.70	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

2004-7

RATING CHARACTERISTIC CURVES (SPL560PT THRU SPL5100PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

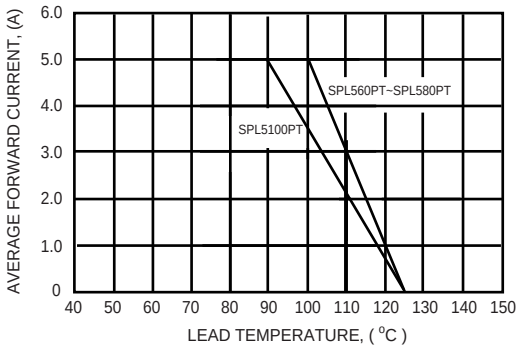


FIG. 2 - INSTANTANEOUS FORWARD CURRENT, (A)

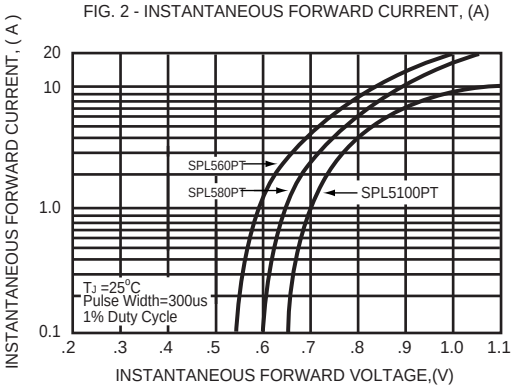


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

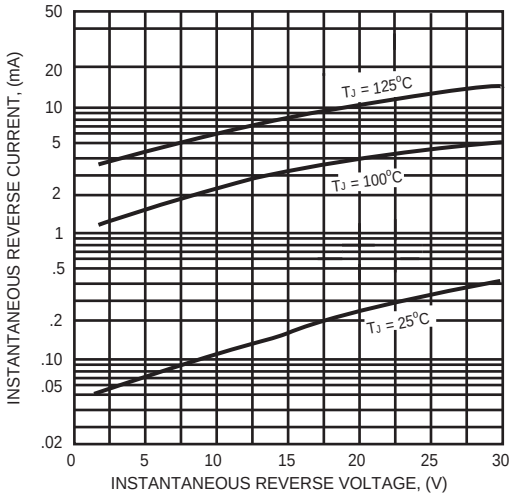


FIG. 4 - MAXIMUM NON-REPETIVE FORWARD SURGE CURRENT

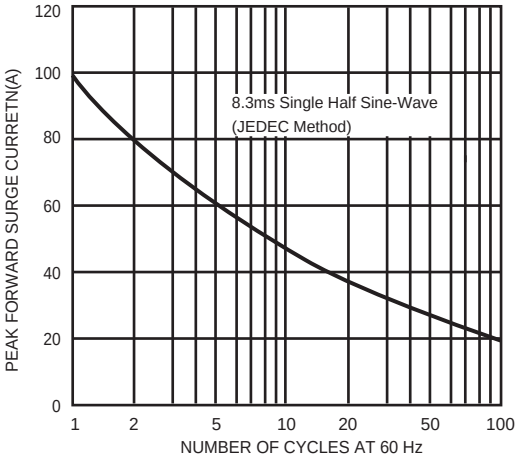
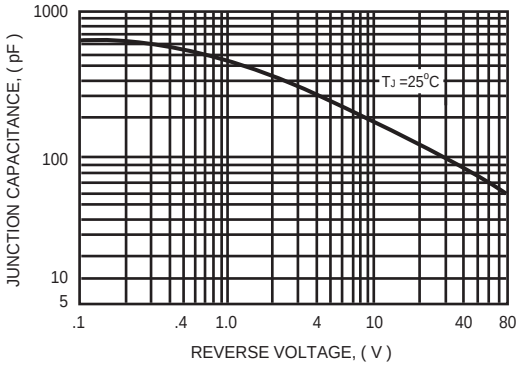



FIG. 5 - TYPICAL JUNCTION CAPACITANCE