



# CHENMKO ENTERPRISE CO.,LTD

Lead free devices

## SURFACE MOUNT

### SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 40 Volts CURRENT 3.0 Amperes

**SPL340PT**

PROVISIONAL SPEC.

#### APPLICATION

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

#### FEATURE

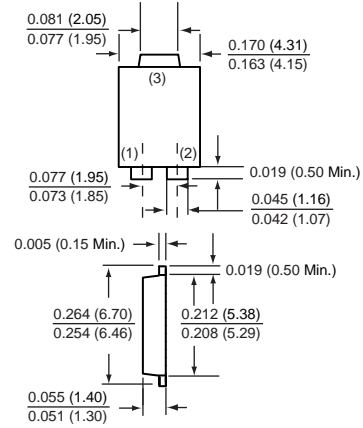
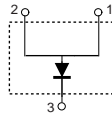
- \* Small Surface Mounting Type. (SMP)
- \* High speed ( $T_{RR}=8.0nSec$  TYP.)
- \* Low Power Loss, High Efficiency .
- \* Low Forward Voltage Drop .
- \* Peak Forward Surge Current Is 110A.
- \* Schottky Diode Array .

#### WEIGHT

#### MARKING

SMP

#### CIRCUIT



SMP

#### MAXIMUM RATINGS ( At $T_A = 25^{\circ}C$ unless otherwise noted )

RATINGS	SYMBOL	SPL340PT	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	Volts
Maximum RMS Voltage	$V_{RMS}$	28	Volts
Maximum DC Blocking Voltage	$V_{DC}$	40	Volts
Maximum Average Forward Rectified Current	$I_O$	3.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	110	Amps
Typical Junction Capacitance (Note 2)	$C_J$	250	pF
Typical Thermal Resistance (Note 3)	$R_{\theta JL}$	15	$^{\circ}C / W$
Operating Temperature Range	$T_J$	-65 to +125	$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-65 to +150	$^{\circ}C$

#### ELECTRICAL CHARACTERISTICS ( At $T_A = 25^{\circ}C$ unless otherwise noted )

CHARACTERISTICS	SYMBOL	SPL340PT	UNITS
Maximum Instantaneous Forward Voltage at 3.0 A DC (Note 1)	$V_F$	0.5	Volts
Maximum Average Reverse Current (Note 1) at Rated DC Blocking Voltage	@ $T_A = 25^{\circ}C$	0.5	mAmps
	@ $T_A = 100^{\circ}C$	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 ( SPL340PT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

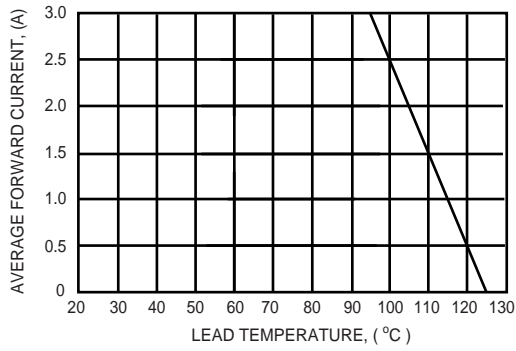


FIG. 2 - FORWARD CHARACTERISTICS

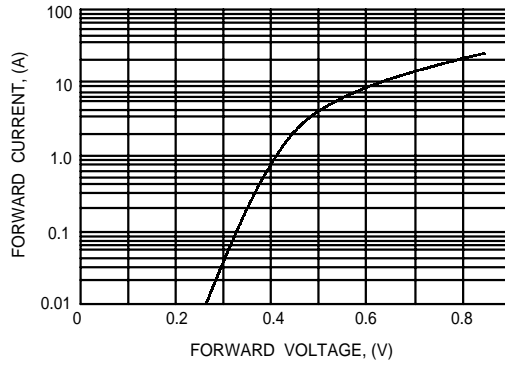


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

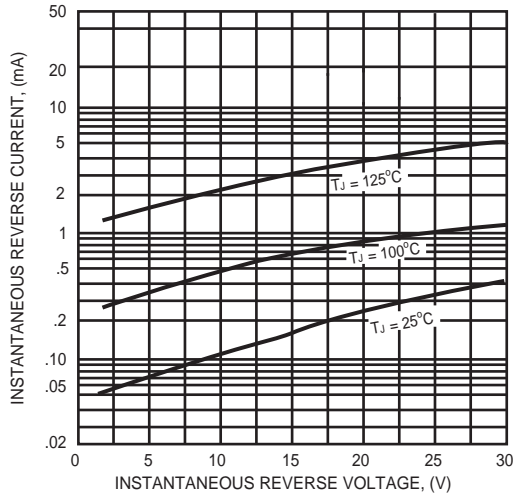


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

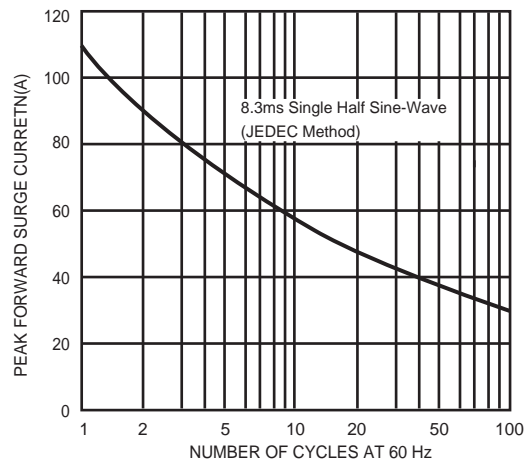


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

