



# CHENMKO ENTERPRISE CO.,LTD

Lead free devices

## SURFACE MOUNT

### SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 40 Volts CURRENT 10 Amperes

SPL1040LAPT

PROVISIONAL SPEC.

**APPLICATION**

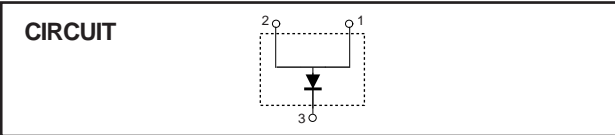
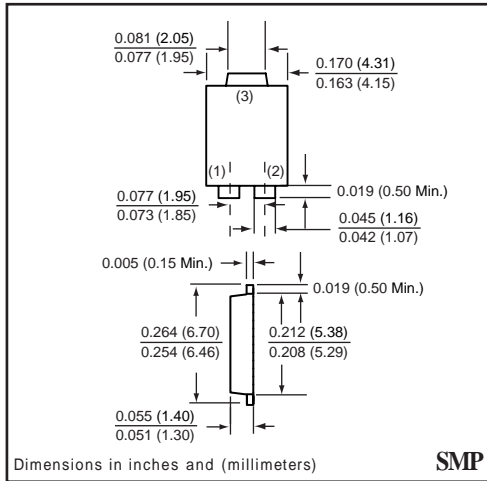
- \* DC to DC Converters
- \* Switch- Mode Power Supplies
- \* Notebook PC

**FEATURE**

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

**WEIGHT**

**MARKING**



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

RATINGS	SYMBOL	SPL1040LAPT	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	$I_o$	10	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)	$C_J$	210	pF
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$	15	$^{\circ}\text{C} / \text{W}$
Operating Temperature Range	$T_J$	-65 to +125	$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	-65 to +150	$^{\circ}\text{C}$

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

CHARACTERISTICS	SYMBOL	SPL1040LAPT	UNITS
Maximum Instantaneous Forward Voltage at 10 A DC	$V_F$	0.385	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@ $T_A = 25^{\circ}\text{C}$	1.0	mAmps
	@ $T_A = 100^{\circ}\text{C}$	20	mAmps

NOTES : 1. P.C.B. mounted 0.31 x 0.31" ( 8 x 8mm) copper pad areas  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts

## RATING CHARACTERISTIC CURVES ( SPL1040LAPT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

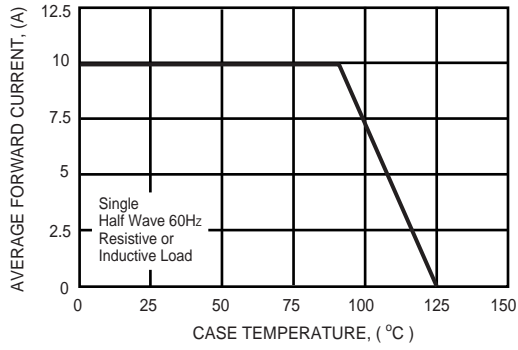


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

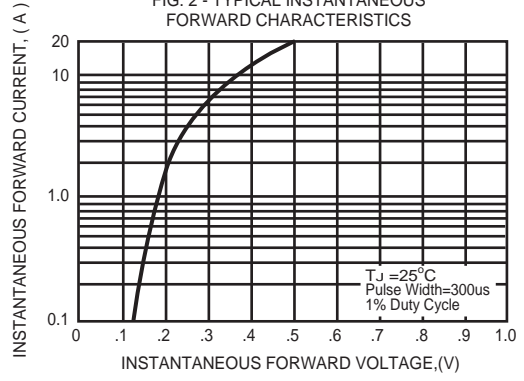


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

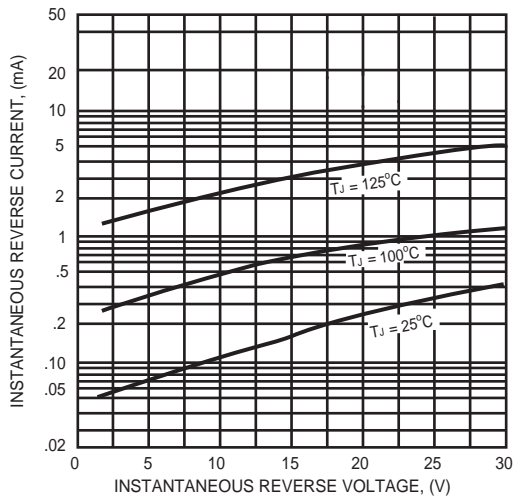


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

