



CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 60 - 100 Volts CURRENT 5.0 Amperes

Lead free devices

**SPL560PT
THRU
SPL5100PT**

PROVISIONAL SPEC.

APPLICATION

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

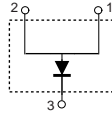
FEATURE

- * 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 100A.
- * Schottky Diode Array .

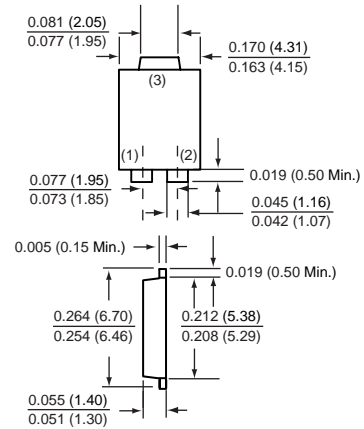
WEIGHT

MARKING

CIRCUIT



SMP



SMP

MAXIMUM RATINGS (At $T_A = 25^\circ C$ 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 | | $^\circ C / W$ |
| 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 | 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) 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 (SPL560PT THRU SPL5100PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

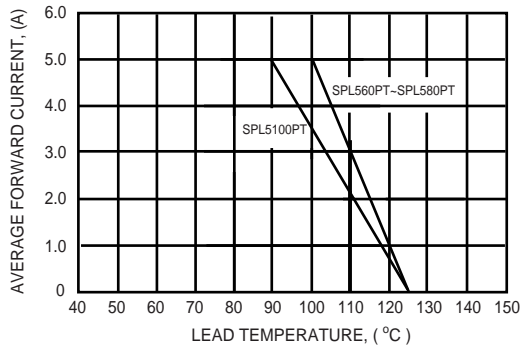


FIG. 2 - INSTANTANEOUS FORWARD CURRENT, (A)

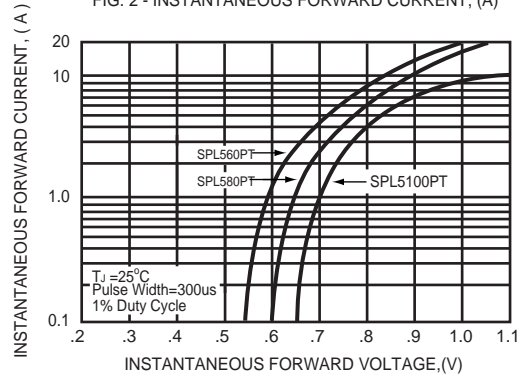


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

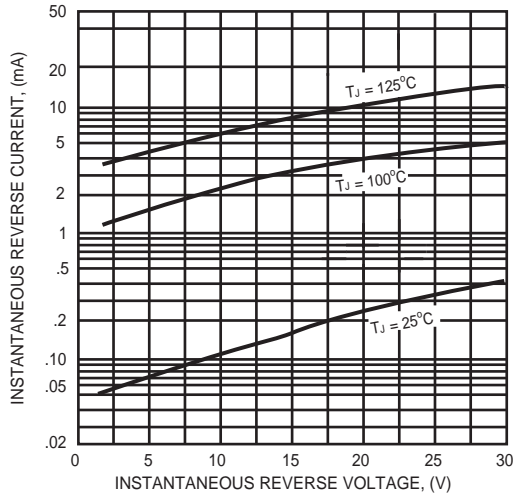


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

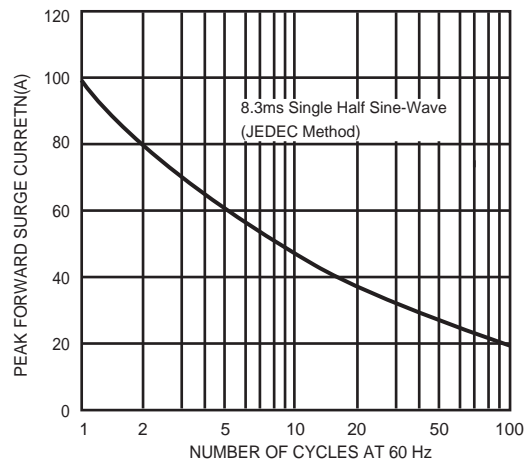


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

