



**CHENMKO ENTERPRISE CO.,LTD**

Lead free devices

**SURFACE MOUNT**

**SCHOTTKY DIODE ARRAY**

**VOLTAGE 100 Volts CURRENT 3 Amperes**

**MPL3100PT**

**PROVISIONAL SPEC.**

**APPLICATION**

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

**FEATURE**

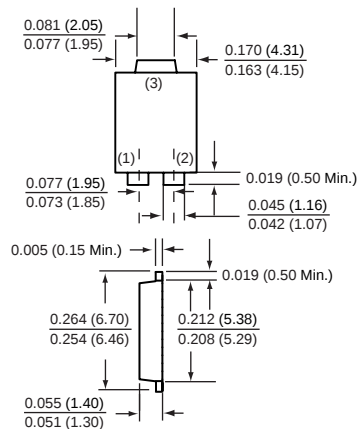
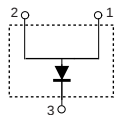
- \* Small Surface Mounting Type. (SMP)
- \* Low Power Loss, High Efficiency
- \* Low Forward Voltage Drop
- \* Peak Forward Surge Current Is 50A.
- \* Schottky Diode Array

**WEIGHT**

**MARKING**

**SMP**

**CIRCUIT**



Dimensions in inches and (millimeters)

**SMP**

| RATINGS                                                | SYMBOL           | MPL3100PT   | UNITS |
|--------------------------------------------------------|------------------|-------------|-------|
| Maximum Recurrent Peak Reverse Voltage                 | V <sub>RRM</sub> | 100         | Volts |
| Maximum RMS Voltage                                    | V <sub>RMS</sub> | 70          | Volts |
| Maximum DC Blocking Voltage                            | V <sub>DC</sub>  | 100         | Volts |
| Maximum Average Forward Rectified Current              | I <sub>O</sub>   | 3           | Amps  |
| Non-Repetitive Peak Forward Surge Current at 8.3 mSec. | I <sub>FSM</sub> | 50          | Amps  |
| Total Capacitance ( f=1.0MHZ , V <sub>r</sub> =4.0VDC) | C <sub>T</sub>   | 100         | pF    |
| Typical Thermal Resistance                             | R <sub>θJA</sub> | 3.2         | °C/W  |
| Maximum Operating Temperature Range                    | T <sub>J</sub>   | -55 to +125 | °C    |
| Storage Temperature Range                              | T <sub>STG</sub> | -55 to +150 | °C    |

**ELECTRICAL CHARACTERISTICS** ( At T<sub>A</sub> = 25°C unless otherwise noted )

| CHARACTERISTICS         | SYMBOL         | MPL3100PT | UNITS |
|-------------------------|----------------|-----------|-------|
| Typ. Forward Voltage    | V <sub>F</sub> | 0.85      | Volts |
| Maximum Reverse Current | I <sub>R</sub> | 10        | uAmps |

## RATING CHARACTERISTIC CURVES ( MPL3100PT )

FIG. 1 - FORWARD CHARACTERISTICS

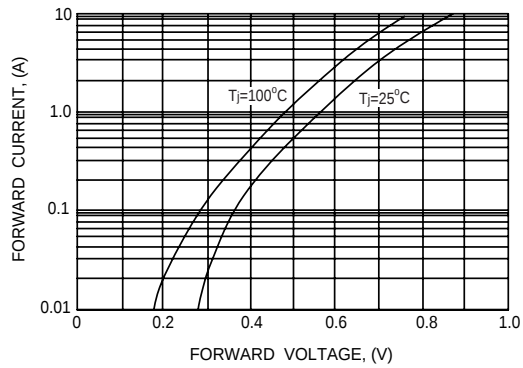


FIG. 2 - REVERSE CHARACTERISTICS

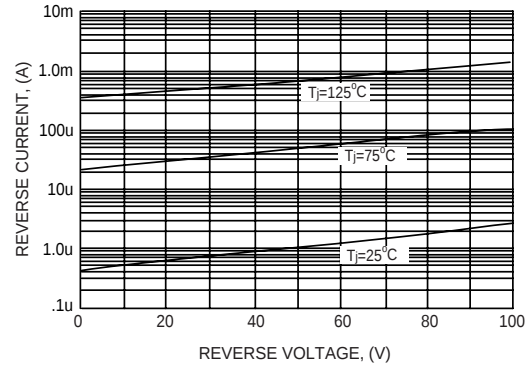


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

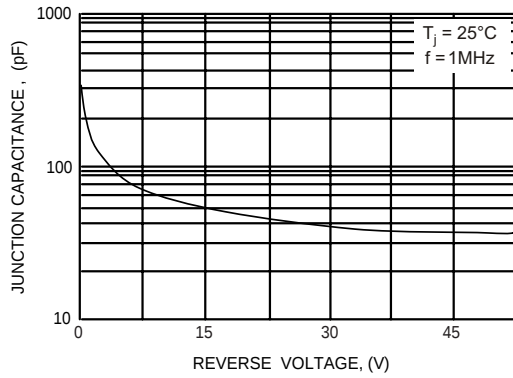


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

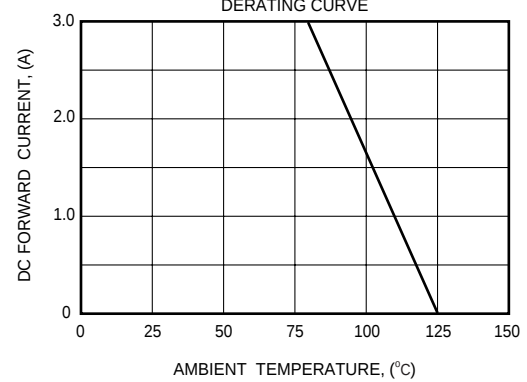


FIG. 5 - MAX. NON-REPETITIVE PEAK FORWARD SURGE CURRENT

