



CHENMKO ENTERPRISE CO.,LTD

MMBD4448VPT

SURFACE MOUNT

SWITCHING DIODE ARRAY

VOLTAGE 80 Volts CURRENT 250 mAmpere

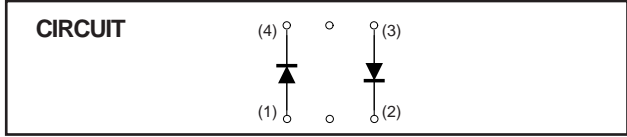
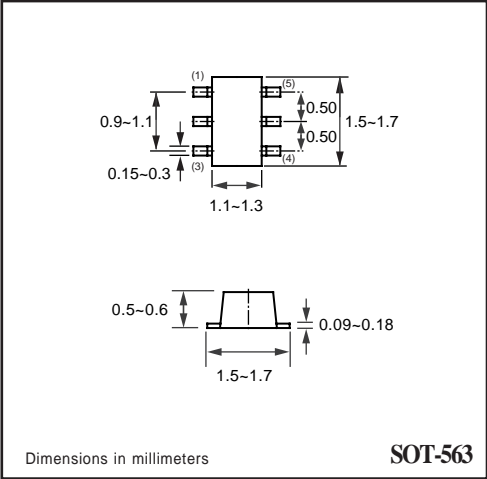
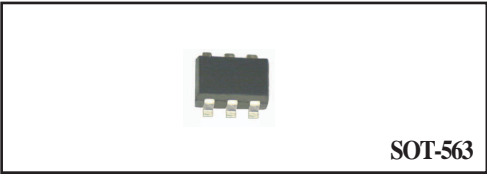
Lead free devices

APPLICATION
* Fast high speed switching

FEATURE
* Small surface mounting type. (SOT-563)
* High speed. ($T_{RR}=4.0nSec$ Max.)
* Fast Switching Speed.
* Ultra-Small Surface Mount Package.
* For General Purpose Switching Applications.
* High Conductance.

CONSTRUCTION
* Silicon epitaxial planar

MARKING
* 3V



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

| RATINGS | SYMBOL | MMBD4448VPT | UNITS |
|--|------------------------------------|-------------|---------------|
| Maximum Non-Repetitive Peak Reverse Voltage | V_{RM} | 100 | Volts |
| Maximum Repetitive Peak Reverse Voltage Maximum Working Peak Reverse Voltage Maximum DC Blocking Voltage | V_{RRM} V_{RWM} V_{DC} | 80 | Volts |
| Maximum RMS Voltage | V_{RMS} | 57 | Volts |
| Maximum Average Forward Rectified Current | I_O | 250 | mAmps |
| Repetitive Peak Forward Current | I_{FRM} | 500 | mAmps |
| Peak Forward Surge Current at 1uSec. | @ 1Sec | 2.0 | Amps |
| | @ 1.0uSec | 4.0 | |
| Total Capacitance | C_T | 3.5 | pF |
| Maximum Reverse Recovery Time | t_{rr} | 4.0 | nSec |
| Maximum Thermal Resistance | $R_{\theta JA}$ | 625 | $^{\circ}C/W$ |
| Maximum Operating and Storage Temperature Range | T_J, T_{STG} | -65 to +150 | $^{\circ}C$ |

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

| CHARACTERISTICS | SYMBOL | MMBD4448VPT | UNITS |
|--|------------------------------------|-------------|-------|
| Maximum Instantaneous Forward Voltage | @ $I_F = 5.0$ mA | 0.72 | Volts |
| | @ $I_F = 100$ mA | 1.0 | |
| Maximum Average Reverse Current (Note 1) | $V_R = 20V$ @ $T_J = 25^{\circ}C$ | 25nA | uAmps |
| | $V_R = 75V$ @ $T_J = 150^{\circ}C$ | 50 | |
| | $V_R = 25V$ @ $T_J = 150^{\circ}C$ | 30 | |

NOTES : 1. Short duration test pulse used to minimize self-heating effect.

2004-07

RATING CHARACTERISTIC CURVES (MMBD4448VPT)

FIG. 1 - FORWARD CHARACTERISTICS

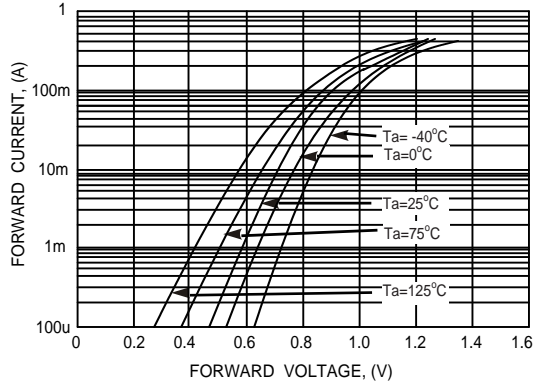


FIG. 2 - REVERSE CHARACTERISTICS

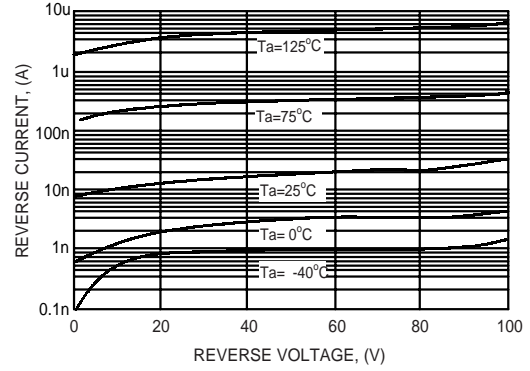


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

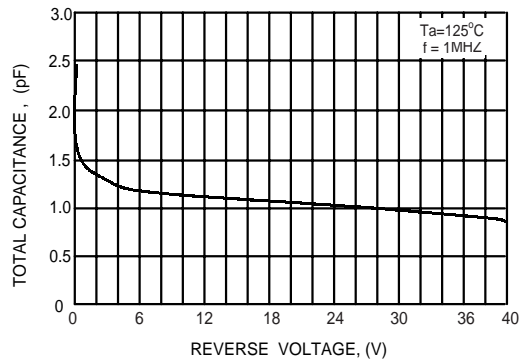


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

