



CHENMKO ENTERPRISE CO.,LTD

Lead free devices

SURFACE MOUNT
SWITCHING DIODE ARRAY

VOLTAGE 80 Volts CURRENT 250 mAmpere

MMBD4448HADWPT

APPLICATION

* Fast high speed switching

FEATURE

- * Small surface mounting type. (SC-88/SOT-363)
- * High speed. (T_{RR}=4.0nSec Max.)
- * Fast Switching Speed.
- * Ultra-Small Surface Mount Package.
- * For General Purpose Switching Applications.
- * High Conductance.

CONSTRUCTION

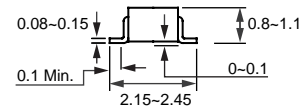
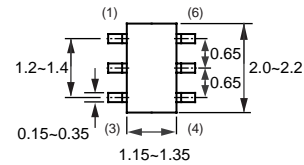
* Silicon epitaxial planar

MARKING

* DS



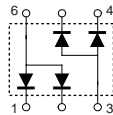
SC-88/SOT-363



Dimensions in millimeters

SC-88/SOT-363

CIRCUIT



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

| RATINGS | SYMBOL | MMBD4448HADWPT | 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 _{θJA} | 625 | °C/W |
| Maximum Operating and Storage Temperaturd Range | T _J ,T _{STG} | -65 to +150 | °C |

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

| CHARACTERISTICS | SYMBOL | MMBD4448HADWPT | 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°C | 25nA | uAmps |
| | V _R = 75V @T _J =150°C | 50 | |
| | V _R = 25V @T _J =150°C | 30 | |

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

2003-12

RATING CHARACTERISTIC CURVES (MMBD4448HADWPT)

FIG. 1 - FORWARD CHARACTERISTICS

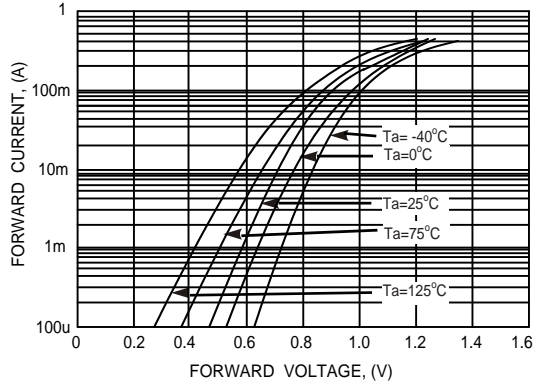


FIG. 2 - REVERSE CHARACTERISTICS

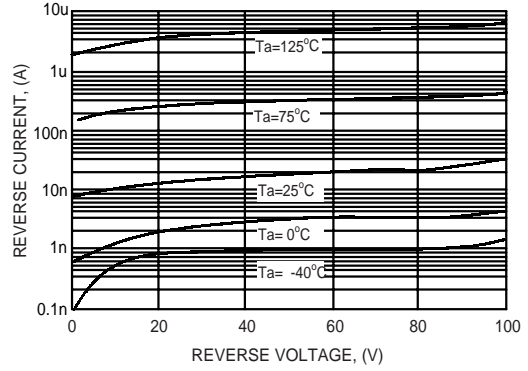


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

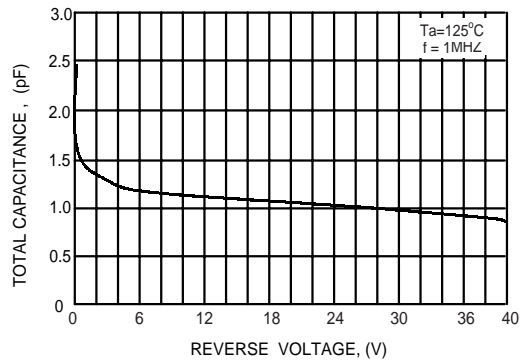


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

