



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

**SURFACE MOUNT
SWITCHING DIODE ARRAY**

VOLTAGE 80 Volts CURRENT 250 mAmpere

MMBD4448HCQWGP

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

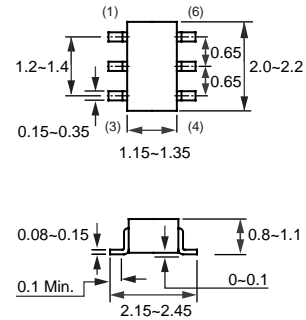
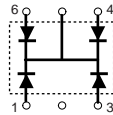
MARKING

- * DR



SC-88/SOT-363

CIRCUIT



Dimensions in millimeters

SC-88/SOT-363

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

RATINGS	SYMBOL	MMBD4448HCQWGP	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 _R V _{RRM} 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 Temperature Range	T _J ,T _{STG}	-65 to +150	°C

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

CHARACTERISTICS	SYMBOL	MMBD4448HCQWGP	UNITS
Maximum Instantaneous Forward Voltage @ I _F = 5.0 mA @ I _F = 100 mA	V _F	0.72 1.0	Volts
Maximum Average Reverse Current (Note 1) V _R = 20V @T _J =25°C V _R = 75V @T _J =150°C V _R = 25V @T _J =150°C	I _R	25nA 50 30	uAmps

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

2003-12

RATING CHARACTERISTIC CURVES (MMBD4448HCQWGP)

FIG. 1 - FORWARD CHARACTERISTICS

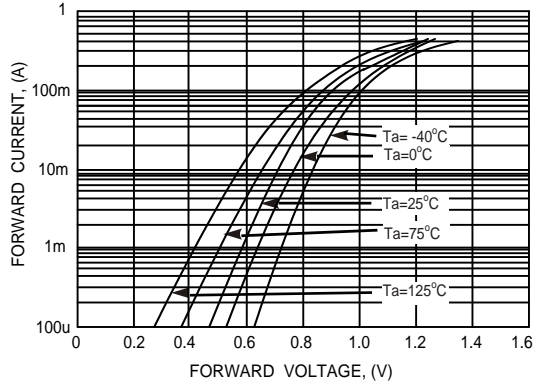


FIG. 2 - REVERSE CHARACTERISTICS

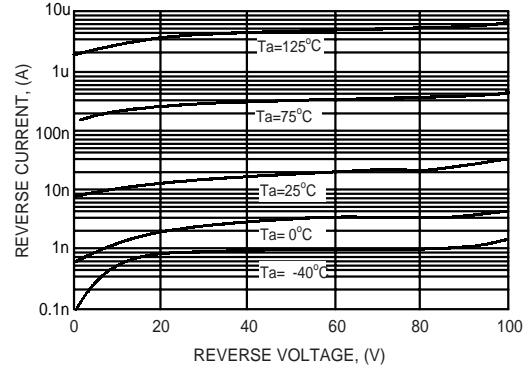


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

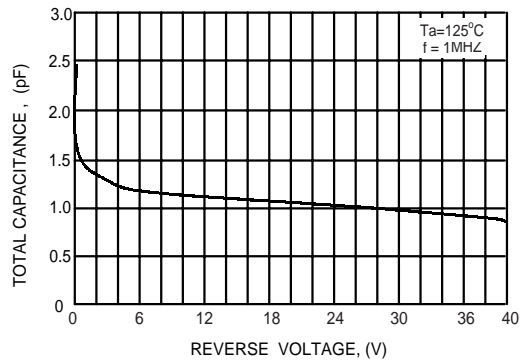


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

