



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

**SURFACE MOUNT
SWITCHING DIODE ARRAY**

VOLTAGE 80 Volts CURRENT 250 mAmpere

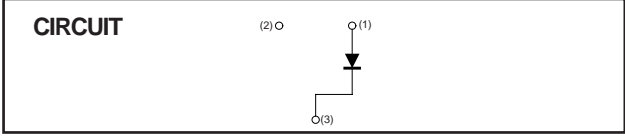
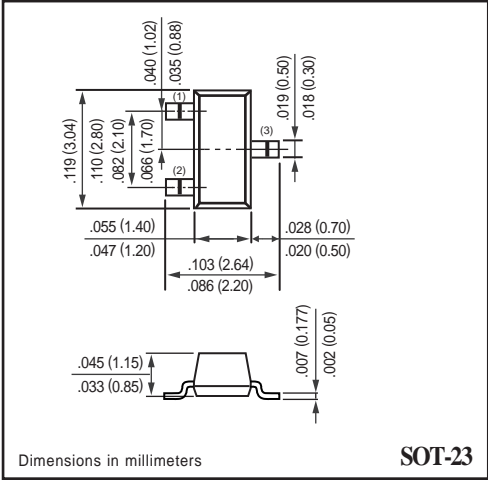
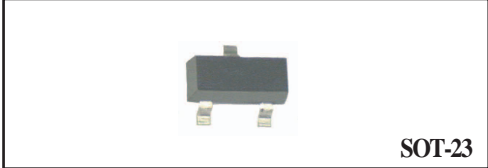
MMBD4448GP

APPLICATION
* Fast high speed switching

FEATURE
* Small surface mounting type. (SOT-23)
* 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
* 5A-



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

RATINGS		SYMBOL	MMBD4448GP	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	I _{FSM}	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 TA = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	MMBD4448GP	UNITS
Maximum Instantaneous Forward Voltage	@ I _F = 5.0 mA	V _F	0.72	Volts
	@ I _F = 100 mA		1.0	
Maximum Average Reverse Current (Note 1)	V _R = 20V @T _J =25°C	I _R	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.

2004-10

RATING CHARACTERISTIC CURVES (MMBD4448GP)

FIG. 1 - FORWARD CHARACTERISTICS

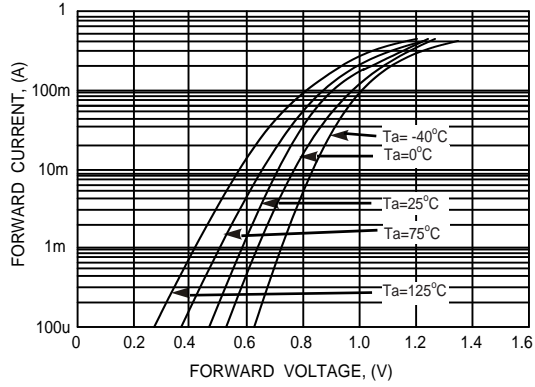


FIG. 2 - REVERSE CHARACTERISTICS

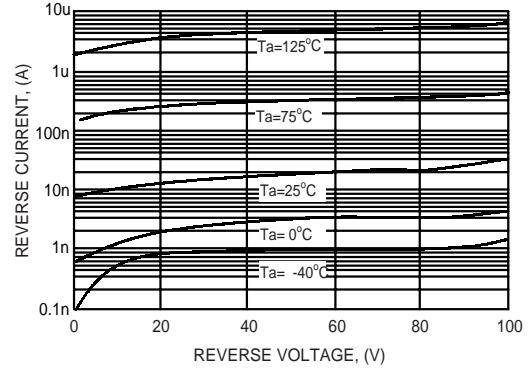


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

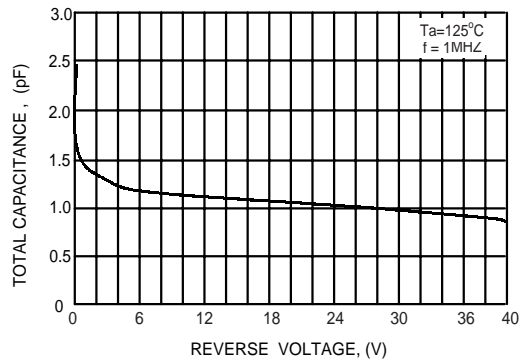


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

