



**CHENMKO ENTERPRISE CO.,LTD**

Lead free devices

**SURFACE MOUNT  
SWITCHING DIODE ARRAY**

VOLTAGE 80 Volts CURRENT 250 mAmpere

**MMBD4448N1CPT**

**APPLICATION**

- \* Fast high speed switching

**FEATURE**

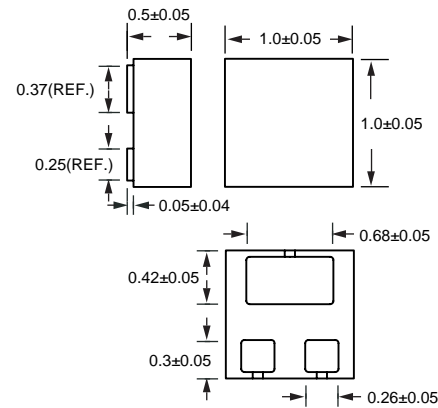
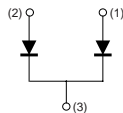
- \* Small surface mounting type. (FBPT-923)
- \* High speed. (T<sub>RR</sub>=4.0nSec Max.)
- \* Fast Switching Speed.
- \* Ultra-Small Surface Mount Package.
- \* For General Purpose Switching Applications.
- \* High Conductance.

**CONSTRUCTION**

- \* Silicon epitaxial planar

**FBPT-923**

**CIRCUIT**



Dimensions in millimeters

**FBPT-923**

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

RATINGS	SYMBOL	MMBD4448N1CPT	UNITS
Maximum Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	100	Volts
Maximum Repetitive Peak Reverse Voltage Maximum Working Peak Reverse Voltage Maximum DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>DC</sub>	80	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	57	Volts
Maximum Average Forward Rectified Current	I <sub>O</sub>	250	mAmps
Repetitive Peak Forward Current	I <sub>FRM</sub>	500	mAmps
Peak Forward Surge Current at 1uSec.	@ 1Sec	2.0	Amps
	@ 1.0uSec	4.0	
Total Capacitance	C <sub>T</sub>	3.5	pF
Maximum Reverse Recovery Time	t <sub>rr</sub>	4.0	nSec
Maximum Thermal Resistance	R <sub>θJA</sub>	625	°C/W
Maximum Operating and Storage Temperaturd Range	T <sub>J</sub> ,T <sub>STG</sub>	-65 to +150	°C

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

CHARACTERISTICS	SYMBOL	MMBD4448N1CPT	UNITS
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	@ I <sub>F</sub> = 5.0 mA	0.72
		@ I <sub>F</sub> = 100 mA	1.0
Maximum Average Reverse Current (Note 1)	I <sub>R</sub>	V <sub>R</sub> = 20V @T <sub>J</sub> =25°C	25nA
		V <sub>R</sub> = 75V @T <sub>J</sub> =150°C	50
		V <sub>R</sub> = 25V @T <sub>J</sub> =150°C	30

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

2006-07

## RATING CHARACTERISTIC CURVES ( MMBD4448N1CPT )

FIG. 1 - FORWARD CHARACTERISTICS

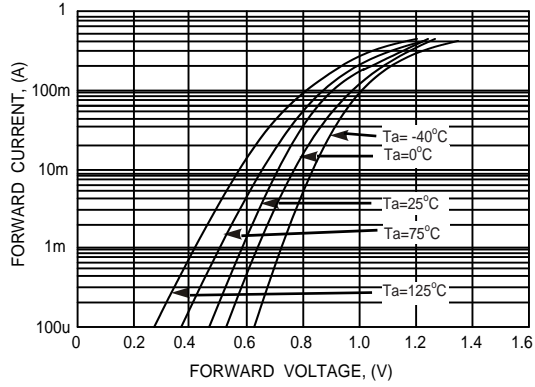


FIG. 2 - REVERSE CHARACTERISTICS

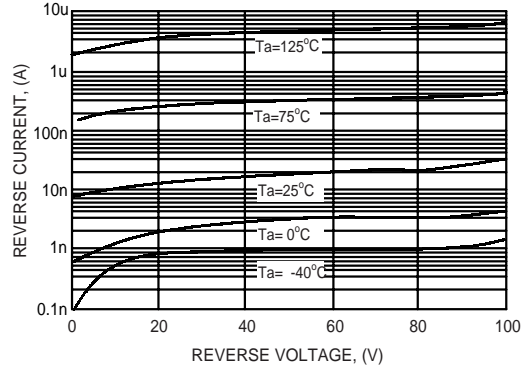


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

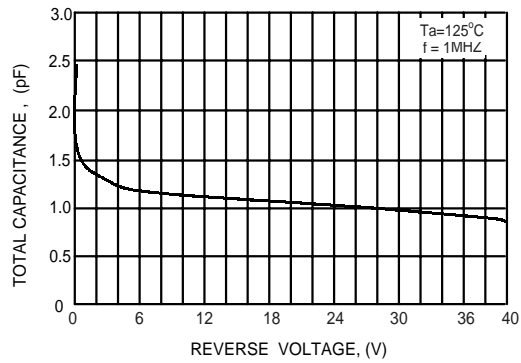


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

