



CHENMKO ENTERPRISE CO.,LTD

BAT54M1PT

SURFACE MOUNT

SCHOTTKY DIODE

VOLTAGE 30 Volts CURRENT 0.2 Ampere

Lead free devices

APPLICATION

- * Ultra high speed switching

FEATURE

- * Small surface mounting type. (BAT54M1PT)
- * High speed. ($T_{RR}=2.5nSec$ Typ.)
- * Suitable for high packing density.
- * Maximum total power dissipation is 230mW.
- * Peak forward current is 300mA.

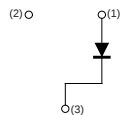
CONSTRUCTION

- * Silicon epitaxial planar

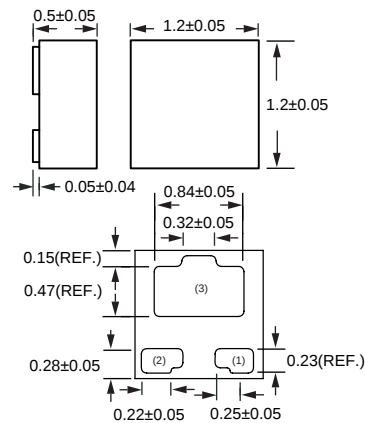
MARKING

- * LV4

CIRCUIT



FBPT-723



Dimensions in millimeters

FBPT-723

RATINGS	SYMBOL	BAT54M1PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	30	Volts
Maximum RMS Voltage	V_{RMS}	21	Volts
Maximum DC Blocking Voltage	V_{DC}	30	Volts
Maximum Average Forward Rectified Current	I_o	0.2	Amps
Peak Forward Surge Current at 1Sec.	I_{FSM}	0.6	Amps
Typical Junction Capacitance between Terminal (Note 1)	C_J	10	pF
Typical Case Resistance (Note 1)	$R_{\theta JC}$	307	$^{\circ}C / W$
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$	354	$^{\circ}C / W$
Maximum Reverse Recovery Time (Note 2)	T_{RR}	5.0	nSec
Maximum Operating Temperature Range	T_J	+150	$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}C$

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

CHARACTERISTICS	SYMBOL	BAT54M1PT	UNITS
Maximum Instantaneous Forward Voltage at $I_F = 100mA$	V_F	1.0	Volts
Maximum Average Reverse Current at $V_R = 25V$	I_R	2.0	uAmps

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 1.0 volts.
 2. Measured at applied forward current of 10mA and reverse current of 10mA.
 3. Thermal Resistance (Junction to Lead) : PC Board Mounted on 0.2 X 0.2" (5 X 5mm) copper pad area.

RATING CHARACTERISTIC CURVES (BAT54M1PT)

FIG. 1 - FORWARD CHARACTERISTICS

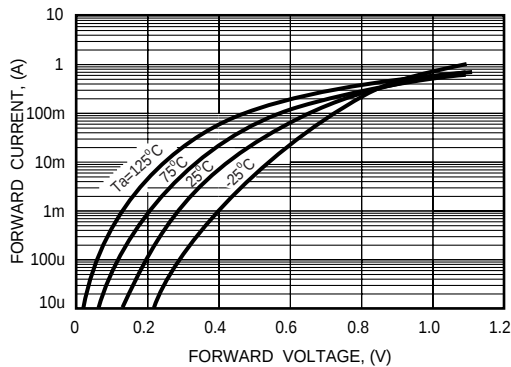


FIG. 2 - REVERSE CHARACTERISTICS

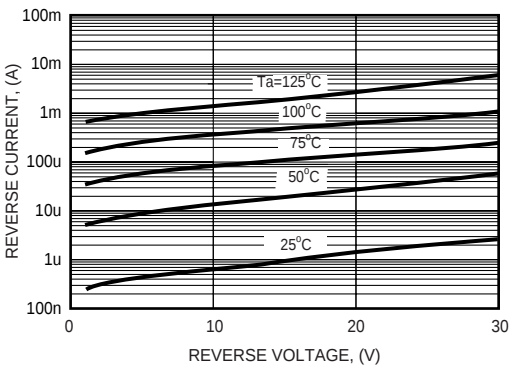


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

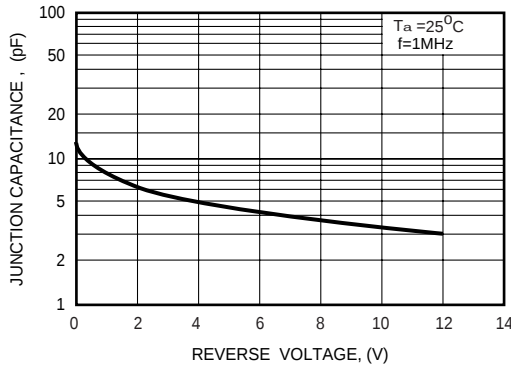


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

