



CHENMKO ENTERPRISE CO.,LTD

Lead free devices

SURFACE MOUNT

SCHOTTKY DIODE ARRAY

VOLTAGE 40 Volts CURRENT 175 mAmperes

CH781UPT

APPLICATION

- * Ultra high speed switching

FEATURE

- * Small surface mounting type. (SC-88/SOT-363)
- * High speed. ($T_{RR}=8.0\text{nSec}$ Typ.)
- * Suitable for high packing density.
- * Maximum total power dissipation is 200mW.
- * Peak forward surge current is 1.0A.
- * Schottky diode array .

CONSTRUCTION

- * PN junction guard ring protection

WEIGHT

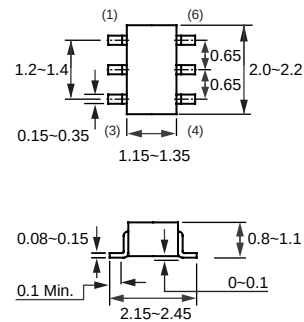
- * 0.008 grams (Approx.)

MARKING

- * JF



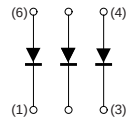
SC-88/SOT-363



Dimensions in millimeters

SC-88/SOT-363

CIRCUIT



RATINGS	SYMBOL	CH781UPT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	Volts
Maximum RMS Voltage	V_{RMS}	28	Volts
Maximum DC Blocking Voltage	V_{DC}	40	Volts
Maximum Forward Continuous Current (Note 1)	I_{FM}	350	mAmps
Maximum Average Forward Rectified Current	I_o	175	mAmps
Non-Repetitive Peak Forward Surge Current at $t \leq 1\text{mSec}$.	I_{FSM}	1.0	Amps
Typical Junction Capacitance between Terminal (Note 2)	C_J	50.0	pF
Typical Reverse Recovery Time (Note 3)	T_{RR}	10.0	nSec
Typical Thermal Resistance	$R_{\theta JA}$	500	$^{\circ}\text{C/W}$
Maximum Operating Temperature Range	T_J	-55 to +125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to +125	$^{\circ}\text{C}$

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

CHARACTERISTICS	SYMBOL	CH781UPT	UNITS
Maximum Instantaneous Forward Voltage	V_F	0.30 0.35 0.37 0.50	mVolts
Maximum Average Reverse Current	I_R	2.0 5.0	uAmps

NOTES : 1. The maximum rating of single diode (D1 or D2 or D3). the maximum rating per diode are 75% of the ratings for single diode operation as using two or three diodes.

2. Measured at 1.0 MHz and applied reverse voltage of 0.0 volts.

3. Measured at applied forward current of 200mA and reverse current of 200mA @ $I_{RR}=0.1I_R$.

4. ESD sensitive product handling required.

2003-04

RATING CHARACTERISTIC CURVES (CH781UPT)

FIG. 1 - FORWARD CHARACTERISTICS

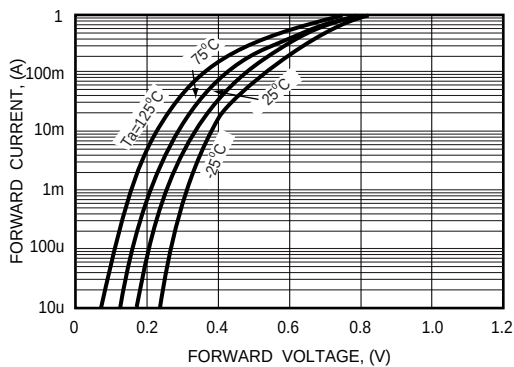


FIG. 2 - REVERSE CHARACTERISTICS

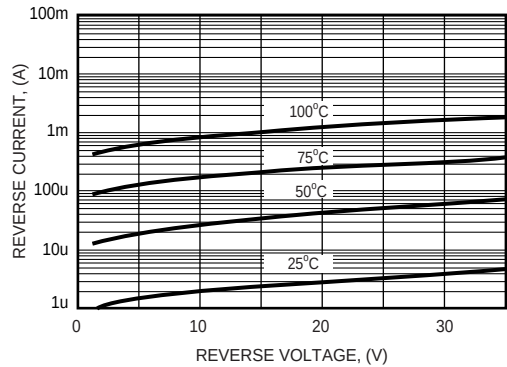


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

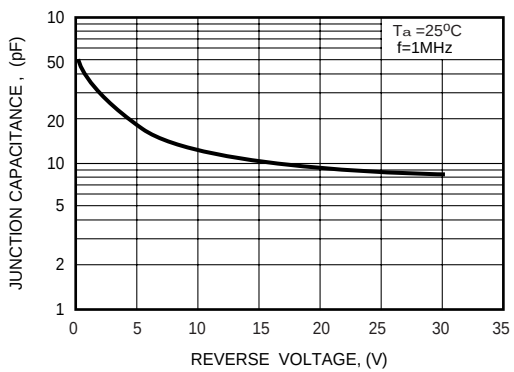


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

