



CHENMKO ENTERPRISE CO., LTD

SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER
VOLTAGE 45 Volts CURRENT 100 mAmpere

CH145SDWPT

Lead free devices

APPLICATION

- * Ultra high speed switching

FEATURE

- * Small surface mounting type. (SC-74/SOT-457)
- * High speed. ($T_{RR}=10\text{nSec}$ Typ.)
- * Suitable for high packing density.
- * Maximum total power dissipation is 225mW.

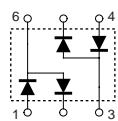
CONSTRUCTION

- * Silicon epitaxial planar

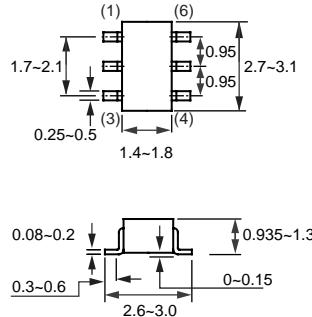
MARKING

- * DM2

CIRCUIT



SC-74/SOT-457



Dimensions in millimeters

SC-74/SOT-457

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

RATINGS	SYMBOL	CH145SDWPT	UNITS
Maximum Non-Repetitive Peak Reverse Voltage	V _{RM}	45	Volts
Maximum RMS Voltage	V _{RMS}	32	Volts
Maximum Repetitive Peak Reverse and DC Blocking Voltage	V _{RRM} , V _D	45	Volts
Forward Continuous Current	I _{FM}	100	mAmps
Non-Repetitive Peak Forward Surge Current at 8.3mSec	I _{FSM}	1.0	Amps
Typical Junction Capacitance between Terminal (Note 1)	C _J	6.0	pF
Total Power Dissipation	P _d	225	mW
Thermal Resistance Junction to Ambient (Note 2)	R _{θJA}	444	°C/W
Maximum Operating and Storage Temperature Range	T _{J,TSTG}	-65 to +125	°C

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

CHARACTERISTICS	SYMBOL	CH145SDWPT	UNITS
Maximum Instantaneous Forward Voltage at 10mA	V _F	450	mVolts
Maximum Average Reverse Current at 10V	I _R	1.0	uAmps

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 0 volts.
2. Device mounted on FR-4 by 1 inch X 0.85 inch X 0.062 inch
3. ESD sensitive product handling required.

2004-06

RATING CHARACTERISTIC CURVES (CH145SDWPT)

FIG. 1 - TYPICAL POWER DERATING CURVE

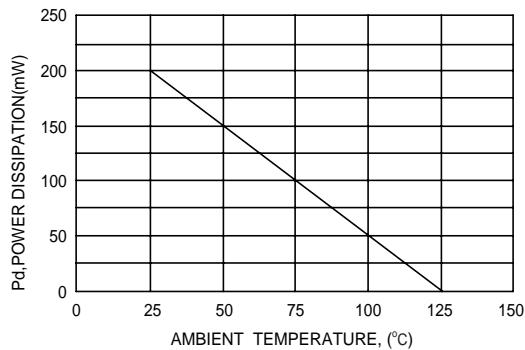


FIG. 2 - FORWARD CHARACTERISTICS

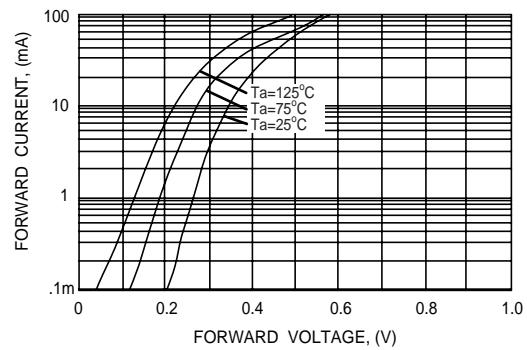


FIG. 3 - REVERSE CHARACTERISTICS

