



CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT

SCHOTTKY BARRIER DIODE

VOLTAGE 30 Volts CURRENT 0.5 Ampere

CH551S-30PT

Lead free devices

APPLICATION

- * Ultra high-speed switching
- * Voltage clamping
- * Protection circuit
- * Low current rectification
- * Low power consumption applications

FEATURE

- * Small surface mounting type. (SC-79/SOD-523)
- * Ultra low VF. (VF=0.41V Typ. at 0.5A)
- * High reliability

CONSTRUCTION

- * Silicon epitaxial planar

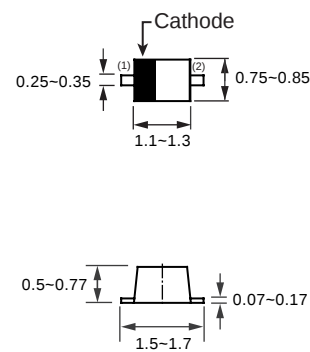
MARKING

- * K

CIRCUIT



SC-79/SOD-523



Dimensions in millimeters

SC-79/SOD-523

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

RATINGS	SYMBOL	CH551S-30PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	30	Volts
Maximum RMS Voltage	V_{RMS}	21	Volts
Maximum DC Blocking Voltage	V_{DC}	20	Volts
Maximum Average Forward Rectified Current	I_o	0.5	Amps
Peak Forward Surge Current at 8.3 mSec single half sine-wave	I_{FSM}	2.0	Amps
Typical Junction Capacitance between Terminal (Note 1)	C_J	15	pF
Maximum Operating Temperature Range	T_J	+125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-40 to +125	$^{\circ}\text{C}$

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

CHARACTERISTICS	SYMBOL	CH551S-30PT	UNITS
Maximum Instantaneous Forward Voltage at $I_F(1) = 100\text{mA}$	$V_F(1)$	0.36	Volts
Maximum Instantaneous Forward Voltage at $I_F(2) = 500\text{mA}$	$V_F(2)$	0.47	Volts
Maximum Average Reverse Current at $V_R = 20\text{V}$	I_R	100	μAmps

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 10.0 volts.
2. ESD sensitive product handling required.

2004-9

RATING CHARACTERISTIC CURVES (CH551S-30PT)

FIG. 1 - FORWARD CHARACTERISTICS

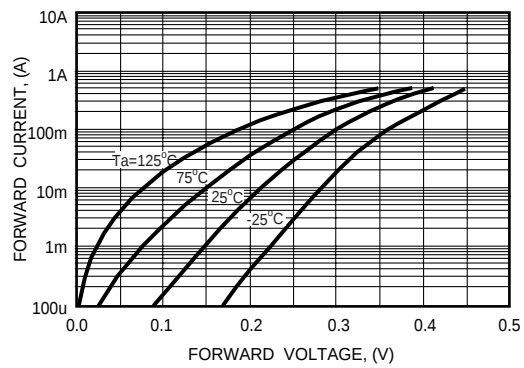


FIG. 2 - REVERSE CHARACTERISTICS

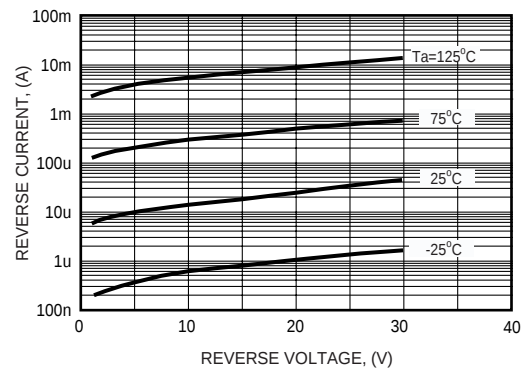


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

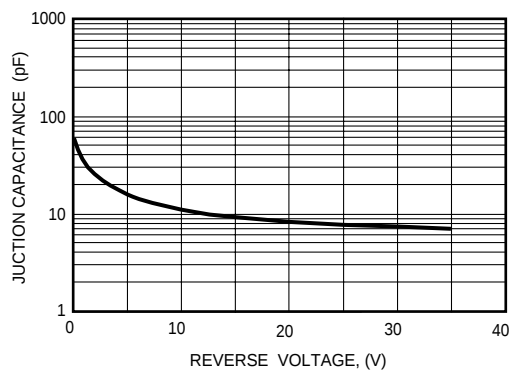


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

