CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT

SCHOTTKY BARRIER DIODE

VOLTAGE   40 Volts   CURRENT   0.75 Ampere

Lead free devices

CH651S-40PT

APPLICATION

* For low-loss, fast-recovery, meter protection, bias isolation and clamping applications

FEATURE

* Small surface mounting type. (SC-79/SOD-523)
* Low IR. (IR=50uA Max.)
* Medium current Schottky rectifier diode
* Miniature plastic package for surface mounting (SMD)

CONSTRUCTION

* Silicon epitaxial planar

MARKING

* N

CIRCUIT

SC-79/SOD-523

Cathode

0.25~0.35   (1)   (2)   0.75~0.85

1.1~1.3

0.5~0.77   0.07~0.17

1.5~1.7
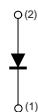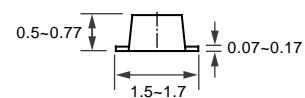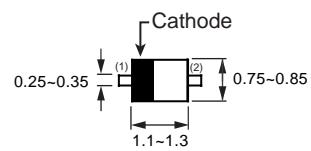
Dimensions in millimeters   **SC-79/SOD-523**

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

RATINGS	SYMBOL	CH651S-40PT			UNITS
		MIN.	TYP.	MAX.	
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 Average Forward Rectified Current	I_O	-	-	0.75	Amps
Peak Forward Surge Current at 8.3 mSec single half sine-wave	I_{FSM}	-	-	2.5	Amps
Typical Junction Capacitance between Terminal (Note 1)	C_J	-	8.4	12	pF
Maximum Operating Temperature Range	T_J	-	-	+150	°C
Storage Temperature Range	T_{STG}	- 65	-	+150	°C

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

CHARACTERISTICS	SYMBOL	CH651S-40PT			UNITS
		MIN.	TYP.	MAX.	
Maximum Instantaneous Forward Voltage at I_F= 10mA	V_F	-	0.305	0.4	Volts
I_F= 100mA		-	0.38	-	
I_F= 200mA		-	0.44	0.7	
I_F= 750mA		-	0.58	-	
Maximum Average Reverse Current at V_R= 30V ,TA = 25°C	I_R	-	-	50	uAmps
V_R= 30V ,TA = 65°C		-	-	900	

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

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RATING CHARACTERISTIC CURVES (CH651S-40PT)

Forward current $I_F = f(T_S)$
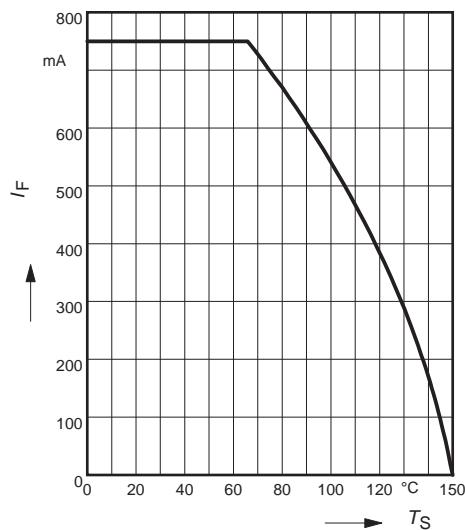
**Diode capacitance** $C_T = f(V_R)$
$f = 1\text{MHz}$
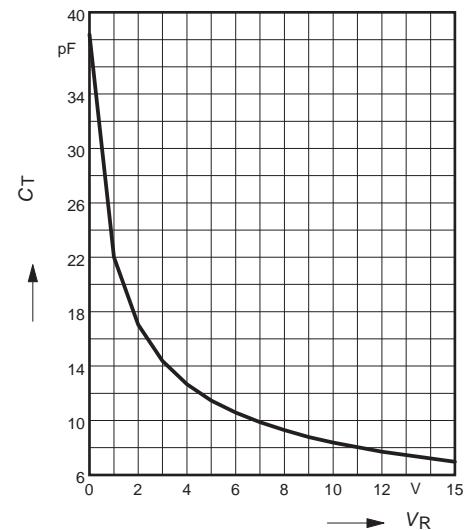
Forward current $I_F = f(V_F)$
T_A = parameter
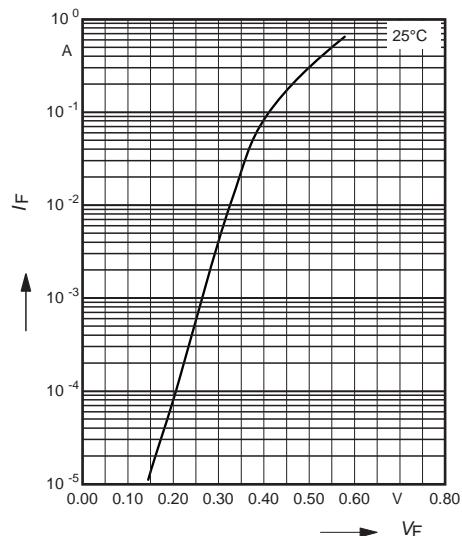
Reverse current $I_R = f(V_R)$
T_A = Parameter