



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

SURFACE MOUNT

SCHOTTKY BARRIER DIODE

VOLTAGE 40 Volts CURRENT 0.75 Ampere

CH651S-40GP

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

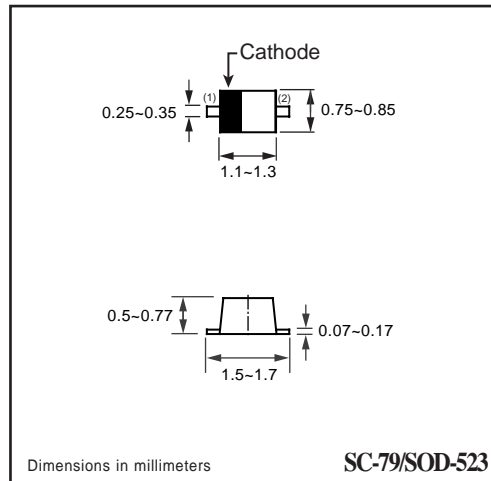
* Silicon epitaxial planar

MARKING

* N



SC-79/SOD-523



Dimensions in millimeters

SC-79/SOD-523

CIRCUIT



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

RATINGS	SYMBOL	CH651S-40GP			UNITS
		MIN.	TYP.	MAX.	
Maximum Recurrent Peak Reverse Voltage	VRRM	-	-	40	Volts
Maximum RMS Voltage	VRMS	-	-	28	Volts
Maximum DC Blocking Voltage	VDC	-	-	40	Volts
Maximum Average Forward Rectified Current	Io	-	-	0.75	Amps
Peak Forward Surge Current at 8.3 mSec single half sine-wave	IFSM	-	-	2.5	Amps
Typical Junction Capacitance between Terminal (Note 1)	CJ	-	8.4	12	pF
Maximum Operating Temperature Range	TJ	-	-	+150	°C
Storage Temperature Range	TSTG	- 65	-	+150	°C

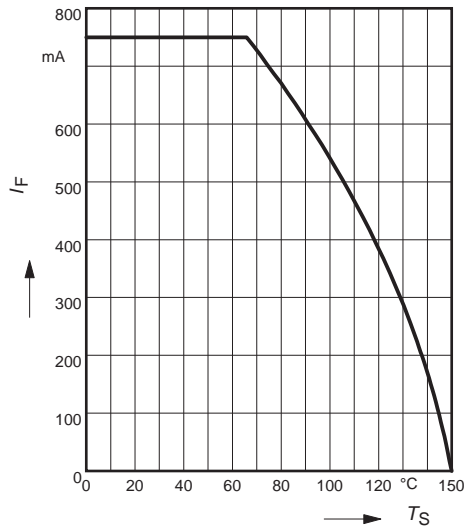
ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

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

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

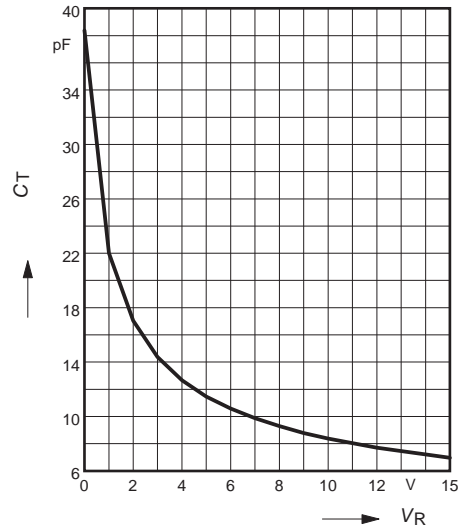
RATING CHARACTERISTIC CURVES (CH651S-40GP)

Forward current $I_F = f(T_S)$



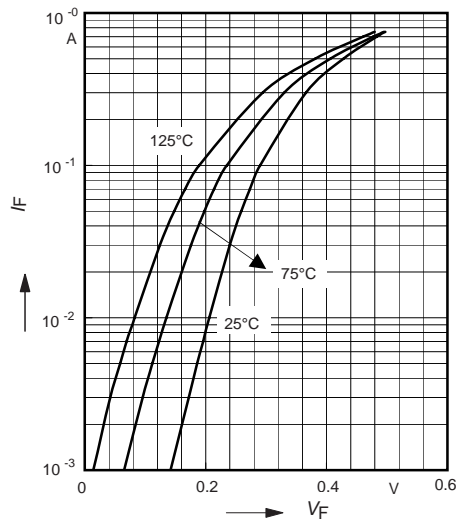
Diode capacitance $C_T = f(V_R)$

$f = 1\text{MHz}$



Forward current $I_F = f(V_F)$

$T_A = \text{parameter}$



Reverse current $I_R = f(V_R)$

$T_A = \text{Parameter}$

