



CHENMKO ENTERPRISE CO.,LTD

CH720S-40PT

Lead free devices

SURFACE MOUNT

SCHOTTKY BARRIER DIODE

VOLTAGE 40 Volts CURRENT 0.04 Ampere

APPLICATION

* Low barrier diode for detectors up to GHz frequencies

FEATURE

* Small surface mounting type. (SC-79/SOD-523)
 * Low VF and low IR
 * High reliability

CONSTRUCTION

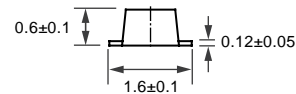
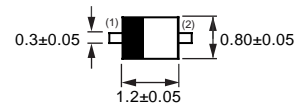
* Silicon epitaxial planar

MARKING

* F



SC-79/SOD-523



Dimensions in millimeters

SC-79/SOD-523

CIRCUIT



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

RATINGS	SYMBOL	CH720S-40PT			UNITS
		MIN.	TYP.	MAX.	
Maximum Recurrent Peak Reverse Voltage	VRRM	-	-	40	Volts
Maximum Average Forward Rectified Current	Io	-	-	40	mAmps
Total Power Dissipation, Ts< 85 °C	PTOT	-	-	150	mW
Typical Series Inductance	Ls	-	0.6	-	nH
Typical Case Capacitance	Cc	-	0.09	-	pF
Typical Junction Capacitance between Terminal (Note 1)	CJ	-	0.35	0.6	pF
Typical Differential Resistance (Note 2)	Ro	-	225	-	kΩ
Operating and Storage Temperature Range	TJ,TSTG	-55	-	+150	°C

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

CHARACTERISTICS	SYMBOL	CH720S-40PT			UNITS
		MIN.	TYP.	MAX.	
Maximum Instantaneous Forward Voltage at If= 2mA	VF	-	0.58	1.00	Volts
Maximum Average Reverse Current at VR= 40V	IR	-	-	10	uAmps

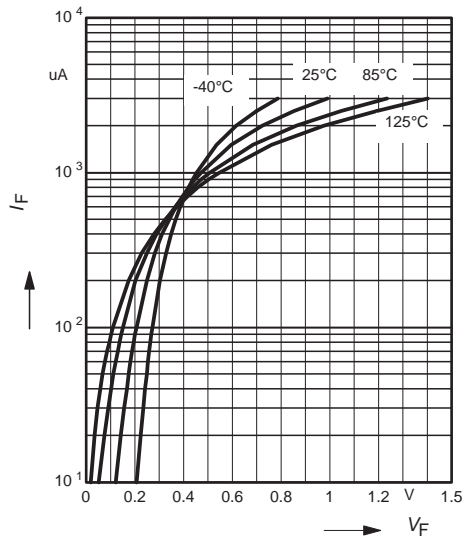
NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 0 volts.
 2. Measured at 1.0 KHz and applied reverse voltage of 0 volts.
 2. ESD sensitive product handling required.

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RATING CHARACTERISTIC CURVES (CH720S-40PT)

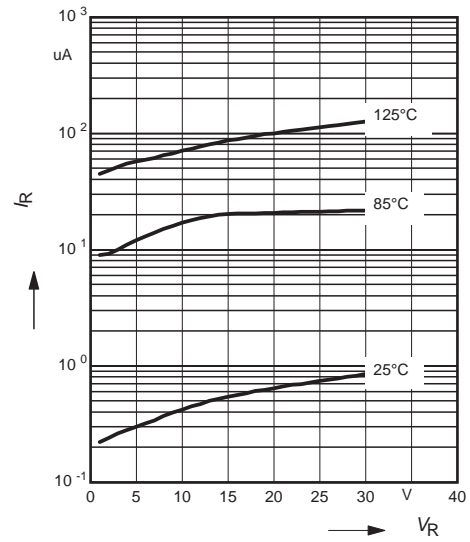
Forward current $I_F = f(V_F)$

$T_A = \text{parameter}$



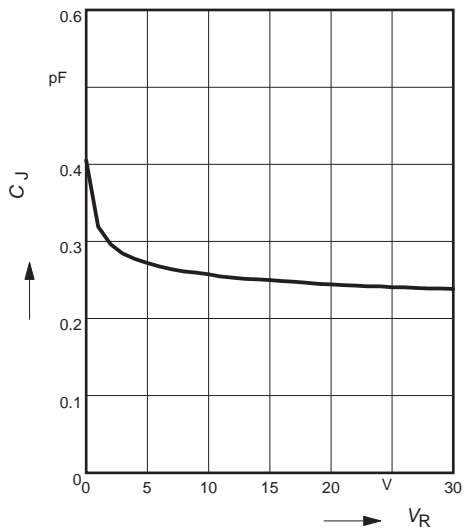
Leakage current $I_R = f(V_R)$

$T_A = \text{Parameter}$



Diode capacitance $C_J = f(V_R)$

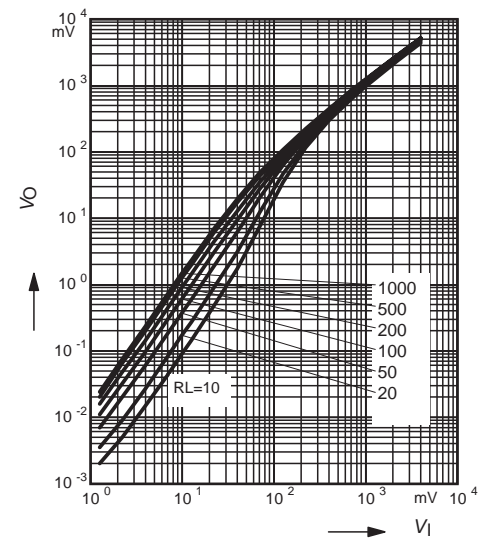
$f = 1\text{MHz}$



Rectifier voltage $V_{out} = f(V_{in})$

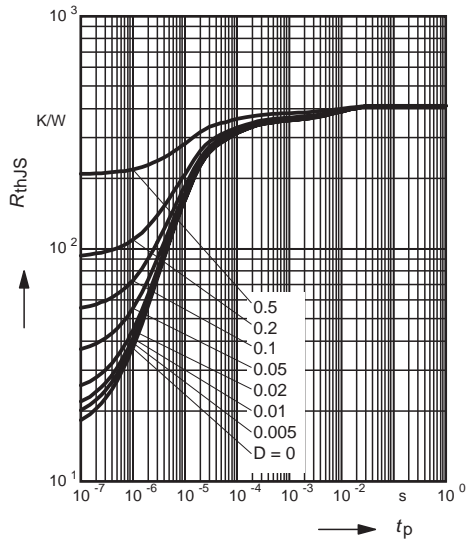
$f = 900\text{ MHz}$

$R_L = \text{parameter in } k\Omega$



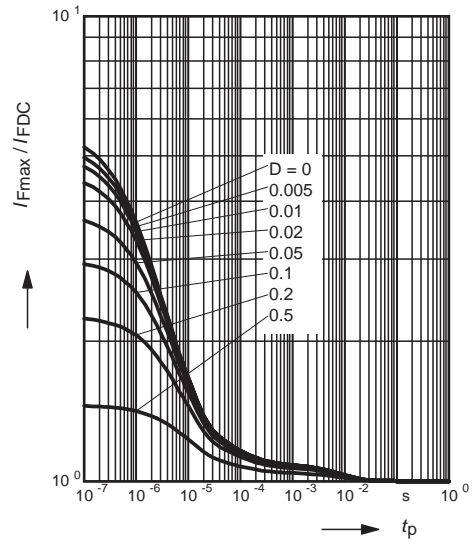
RATING CHARACTERISTIC CURVES (CH720S-40PT)

Permissible Pulse Load $R_{thJS} = f(t_p)$



Permissible Pulse Load

$I_{Fmax} / I_{FDC} = f(t_p)$



Forward current $I_F = f(T_S)$

