



# CHENMKO ENTERPRISE CO.,LTD

**CH740S-40PT**

## SURFACE MOUNT

SCHOTTKY BARRIER DIODE

VOLTAGE 40 Volts CURRENT 0.04 Ampere

*Lead free devices*

### 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

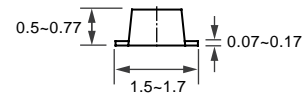
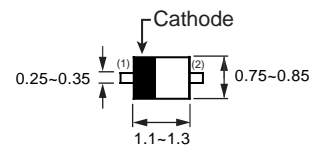
\* Silicon epitaxial planar

### 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	CH740S-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 )

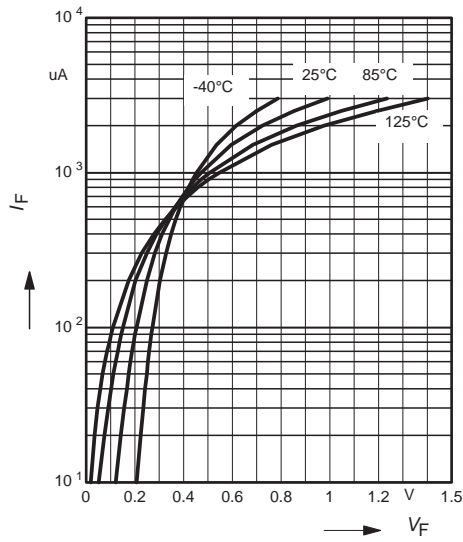
CHARACTERISTICS	SYMBOL	CH740S-40PT			UNITS
		MIN.	TYP.	MAX.	
Maximum Instantaneous Forward Voltage at If= 2mA	VF	-	0.58	1.00	Volts
Maximum Average Reverse Current at VR= 40V	IR	-	-	10	uAmps

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.

## RATING CHARACTERISTIC CURVES ( CH740S-40PT )

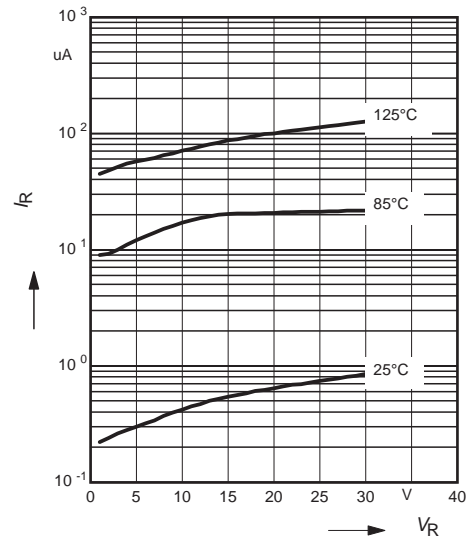
**Forward current  $I_F = f(V_F)$**

$T_A = \text{parameter}$



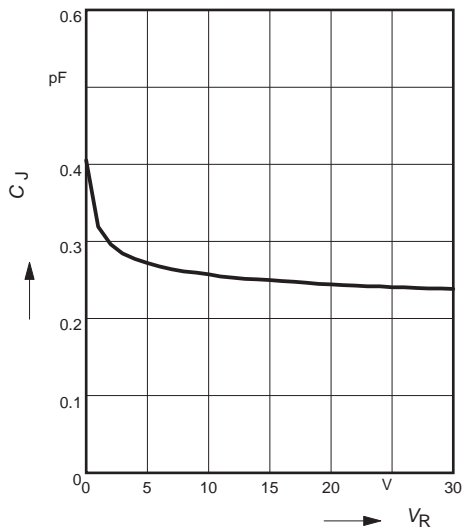
**Leakage current  $I_R = f(V_R)$**

$T_A = \text{Parameter}$



**Diode capacitance  $C_J = f(V_R)$**

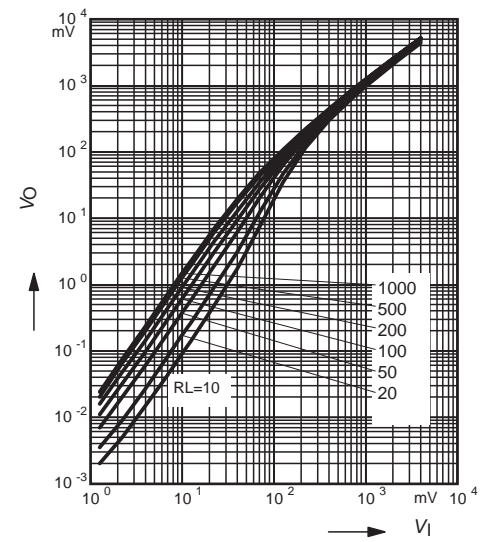
$f = 1\text{MHz}$



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

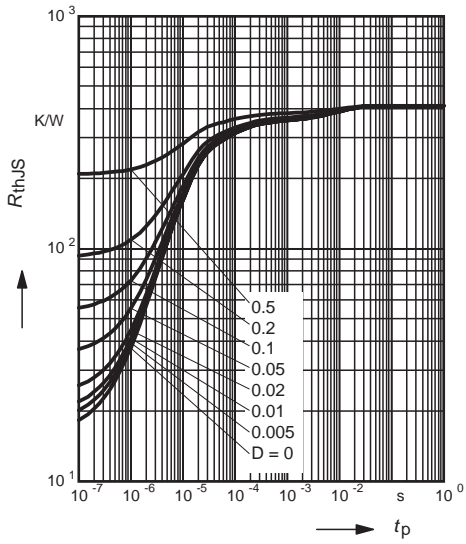
$f = 900\text{ MHz}$

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



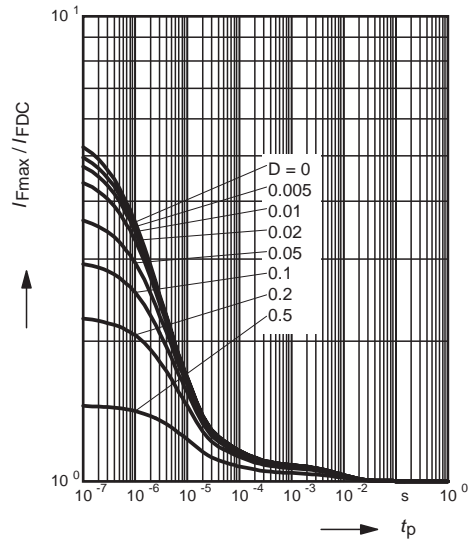
## RATING CHARACTERISTIC CURVES ( CH740S-40PT )

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



**Permissible Pulse Load**

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



**Forward current  $I_F = f(T_S)$**

