CHENMKO ENTERPRISE CO.,LTD

CHRF142GGP

SURFACE MOUNT
PIN DIODE DIODE
VOLTAGE 60 Volts CURRENT 0.1 Ampere

Halogens free devices

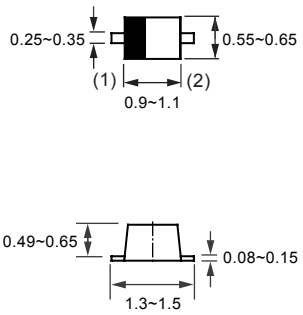
APPLICATION
* Low power rectification and high speed switching

FEATURE
* Extremely small surface mounting type. (SOD-723)
* High frequency resistance which is small and low capacity.

CONSTRUCTION
* Silicon epitaxial planar

CIRCUIT

SOD-723



Dimensions in millimeters

SOD-723

MAXIMUM RATINGES (At T_A = 25°C unless otherwise noted)

RATINGS		SYMBOL	CHRF142GGP	UNITS
Reverse Voltage		V_R	60	Volts
Forward current		I_F	0.1	Amps
High frequency resistance	IF=3mA,f=100MHz	R_f	3	Ω
	IF=10mA,f=100MHz		2	
Typical Junction Capacitance between Terminal (Note 1)		C_J	0.45	pF
Maximum Operating Temperature Range		T_J	+150	°C
Storage Temperature Range		T_{STG}	-55 to +150	°C

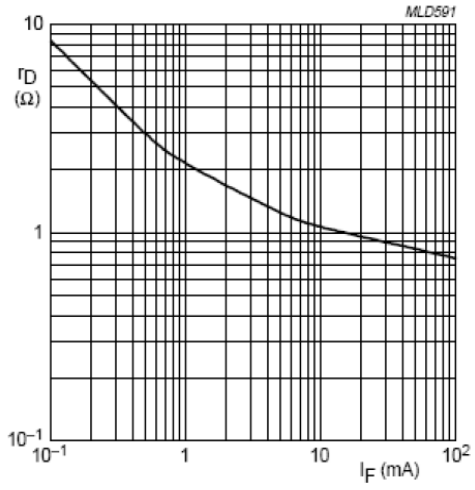
ELECTRICAL CHARACTERISTICS (At T_A = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	CHRF142GPT	UNITS
Maximum Instantaneous Forward Voltage at I_F= 10mA	V_F	1.0	Volts
Maximum Average Reverse Current at V_R= 60V	I_R	0.1	uAmps

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 1.0 volts.

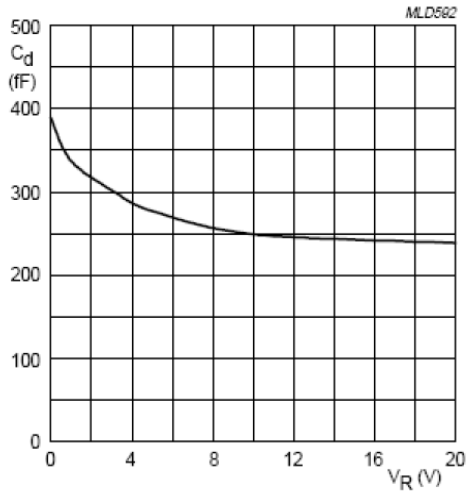
2009-07

RATING CHARACTERISTIC CURVES (CHRF142GGP)



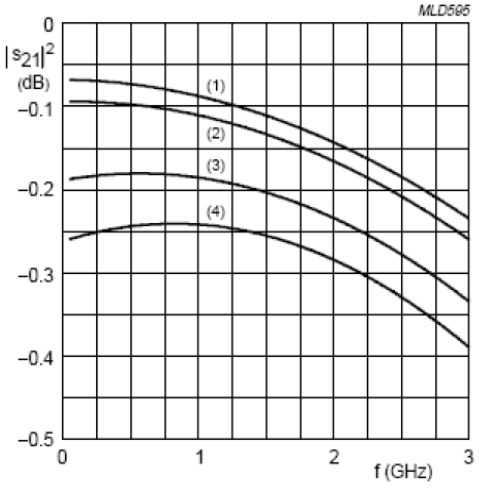
f = 100 MHz; T_j = 25 °C.

Fig1. Forward resistance as a function of Forward current; typical values.



f = 1 MHz; T_j = 25 °C.

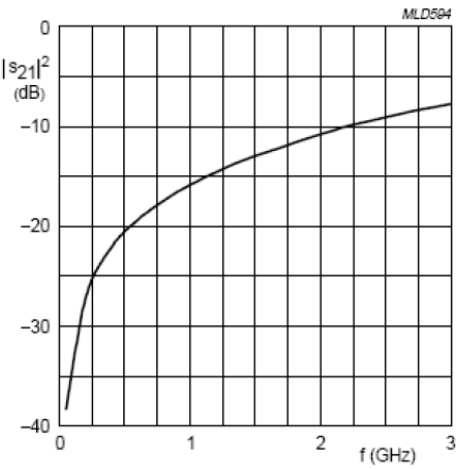
Fig2. Diode capacitance as a function of reverse Voltage; typical values.



(1) I_F = 100 mA.
(2) I_F = 10 mA.
(3) I_F = 1 mA.
(4) I_F = 0.5 mA.

Diode inserted in series with a 50 Ω stripline circuit and biased via the analyzer Tee network.
T_{amb} = 25 °C.

Fig3. Insertion loss of the diode as a function of frequency; typical values.



Diode zero biased and inserted in series with a 50 Ω stripline circuit.
T_{amb} = 25 °C.

Fig4. Isolation of the diode as a function of Frequency; typical values.