

MA553

Silicon epitaxial planer type

For UHF and SHF bands AGC

■ Features

- Small diode capacity C_D
- Large variable range of forward dynamic resistance r_f

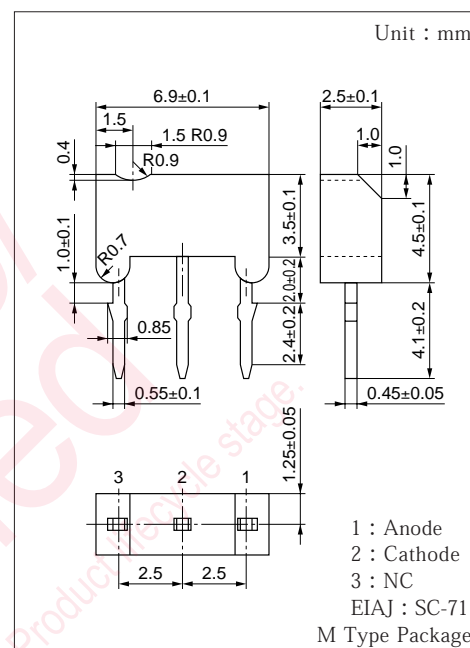
■ Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	40	V
Peak reverse voltage	V_{RM}	45	V
Forward current (DC)	I_F	100	mA
Power dissipation	P_D	150	mW
Operating ambient temperature	T_{opr}	-25 to +80	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

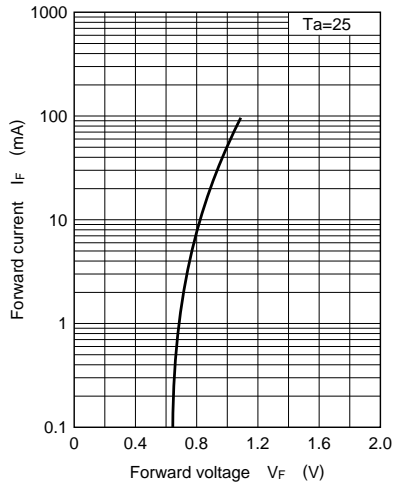
■ Electrical Characteristics ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	I_R	$V_R=40\text{V}$			100	nA
Forward voltage (DC)	V_F	$I_F=100\text{mA}$		1.05	1.2	V
Diode capacitance	C_D	$V_R=15\text{V}$, $f=1\text{MHz}$		0.3	0.5	pF
Forward dynamic resistance	r_{f1}	$I_F=10\ \mu\text{A}$, $f=100\text{MHz}$	1	2		k Ω
	r_{f2}	$I_F=10\text{mA}$, $f=100\text{MHz}$		6	10	Ω

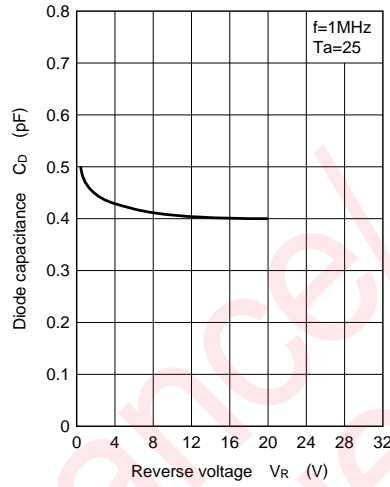
©Rated input/output frequency : 100MHz



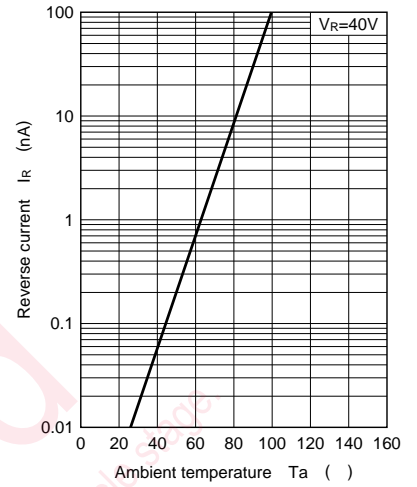
$I_F - V_F$



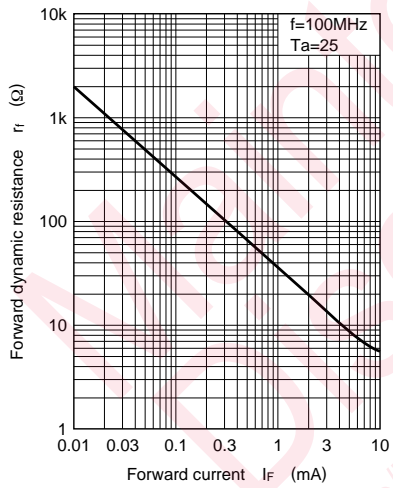
$C_D - V_R$



$I_R - T_a$



$r_f - I_F$



Maintenance/Discontinued includes following four Product lifecycle stages:
 planned maintenance type
 maintenance type
 planned discontinued type
 discontinued type
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Variable	
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