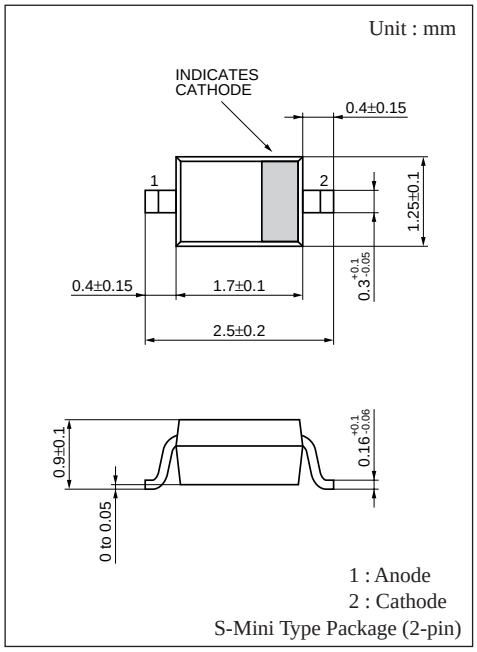
MA733

Silicon epitaxial planer type

For UHF mixer



Marking Symbol : 5B

■ Features

- Small forward voltage V_F
- Large conversion gain GC and optimum for UHF mixer
- S-Mini package, enabling down-sizing of the equipment and automatic insertion through taping

■ Absolute Maximum Ratings (Ta= 25˚C)

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	5	V
Forward voltage	V_F	0.5	V
Junction temperature	T_j	125	˚C
Storage temperature	T_{stg}	– 55 to + 125	˚C

■ Electrical Characteristics (Ta= 25˚C)

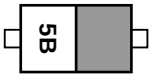
Parameter	Symbol	Condition	min	typ	max	Unit
Forward current (DC)	I_F	V_F = 0.5V	35		100	mA
Reverse current (DC)	I_R	V_R = 5V			35	µA
Forward voltage (DC)	V_F	I_F = 2mA		0.25		V
Reverse yield voltage (DC)	$V_{(BR)R}$	I_R=1mA	5			V
Terminal capacitance	C_t	V_R = 0.5V, f =1MHz	0.65	0.85	1.05	pF
Conversion gain	GC*1, 2	R_F= 890MHz, – 30dBm L_O= 935MHz, +10dBm I_F= 45MHz	–7	–5		dB
Static breakdown strength		C= 100pF Breakdown judgment point $I_R \geq 35\mu A$	100	200		V

Note 1. Schottky barrier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on charge of a human body and leakage from the equipment used.

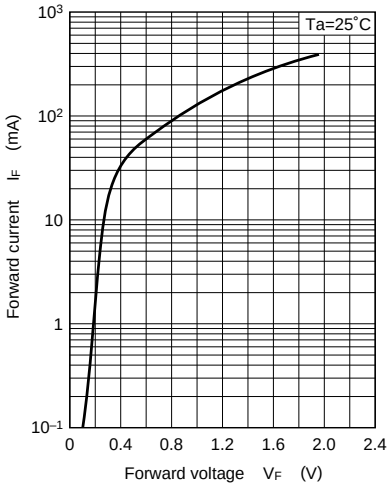
2. Rated input/output frequency : 935MHz

3. *1 Judgement is to be made per each chip lot. Sampling of LTPD= 20% and n=11 is guaranteed.
*2 GC= –7dB min. Any substandard product will be negotiated by both parties.

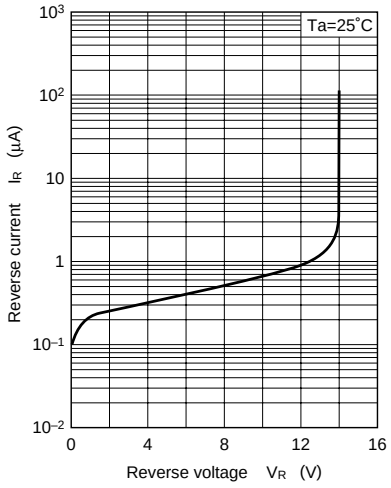
■ Marking



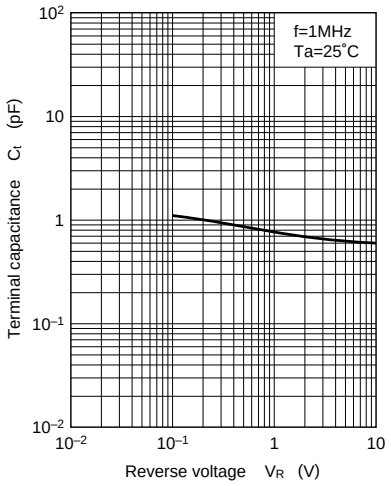
$I_F - V_F$



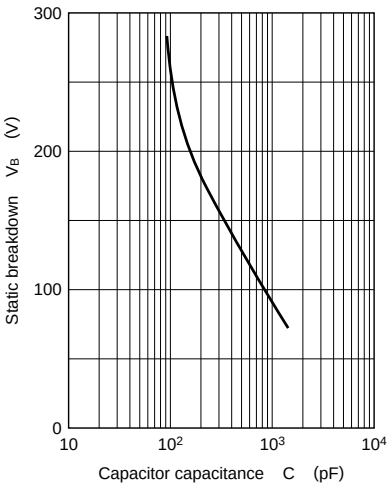
$I_R - V_R$



$C_t - V_R$



$V_B - C$



$GC - P_{LOC}$