

MA342-B, MA342-M

Silicon epitaxial planer type

For UHF and VHF electronic tuners AFC

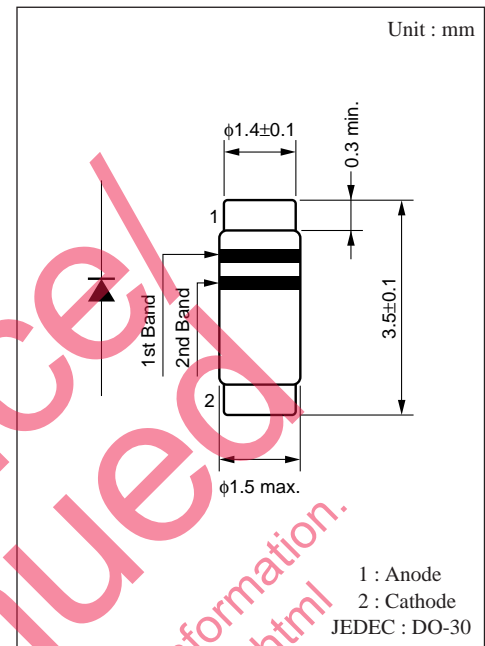
■ Features

- Large capacity variation ratio
- Small series resistance r_D

■ Absolute Maximum Ratings (Ta= 25°C)

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	32	V
Peak reverse voltage	V_{RM}^*	34	V
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	- 55 to +150	°C

* $R_L = 2.2k\Omega$, 1 pulse



■ Electrical Characteristics (Ta= 25°C)

Parameter	Symbol	Condition	min	typ	max	Unit
Forward voltage (DC)	V_F	$I_F = 100mA$			1.1	V
Reverse current (DC)	I_R	$V_R = 30V$			10	nA
Terminal capacitance	C_t	$V_R = 2V, f = 1MHz$	10.5		16	pF
		$V_R = 10V, f = 1MHz$	3.3		5.7	
Capacitance ratio	$C_{t(2V)}/C_{t(10V)}^*$		2.8		3.4	—
	$C_{t(6V)}/C_{t(10V)}^*$		1.64			—
Series resistance	r_D	$C_D = 9pF, f = 470MHz$			1.2	Ω

Note 1. Rated input/output frequency : 470MHz

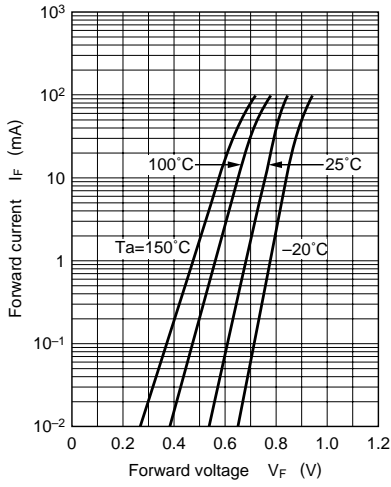
2. * Applicable to the rank M

■ Cathode Indication

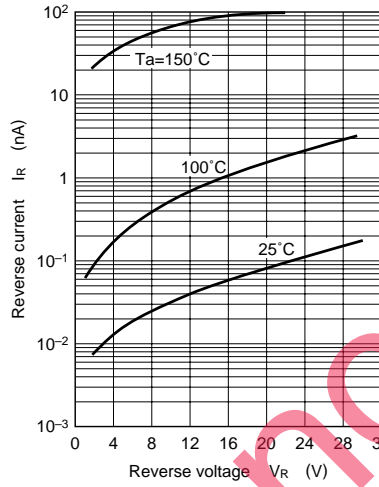
Type No.		MA342-B	MA342-M
Color	1st Band	Blue	Blue
	2nd Band	Green	Blue

Characteristics chart of MA342-B

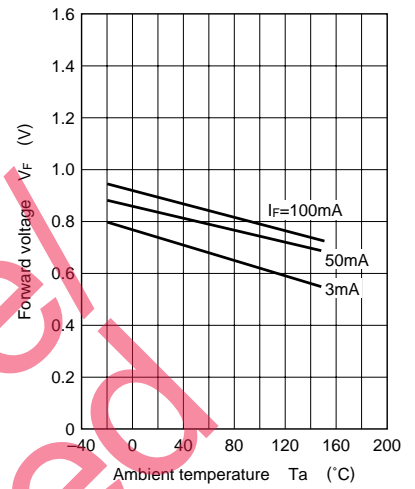
$I_F - V_F$



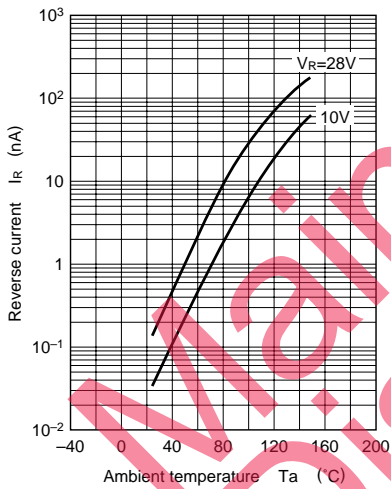
$I_R - V_R$



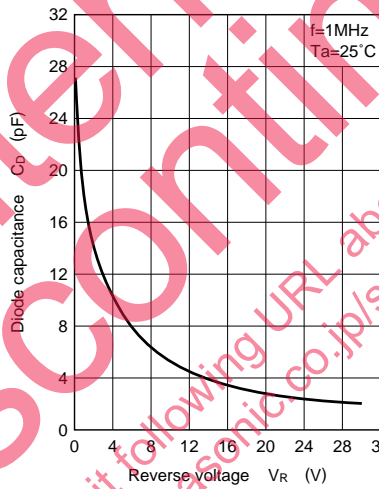
$V_F - T_a$



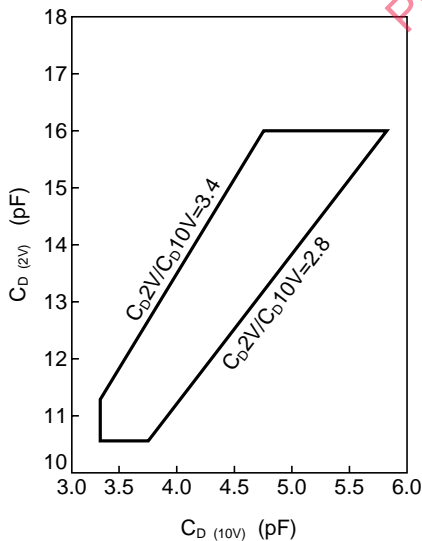
$I_R - T_a$



$C_D - V_R$

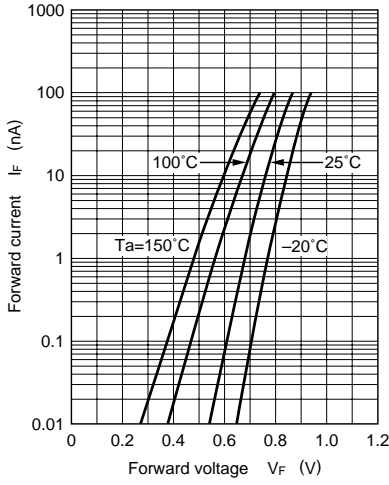


C_D rank classification

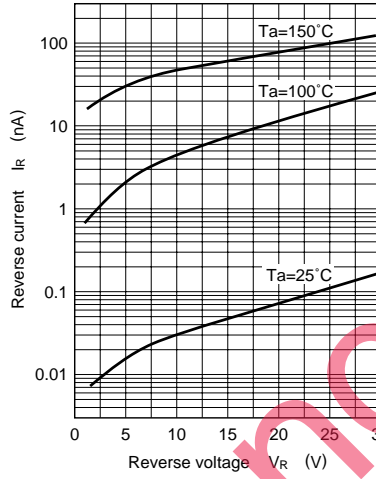


Characteristics chart of MA342-M

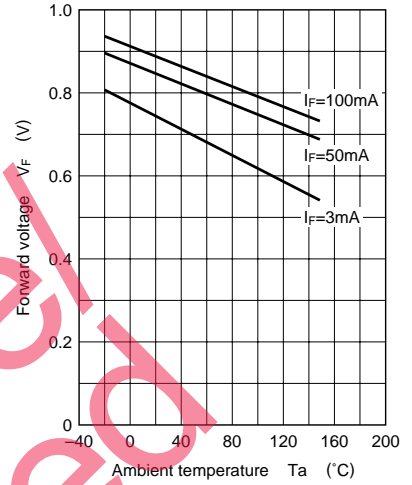
$I_F - V_F$



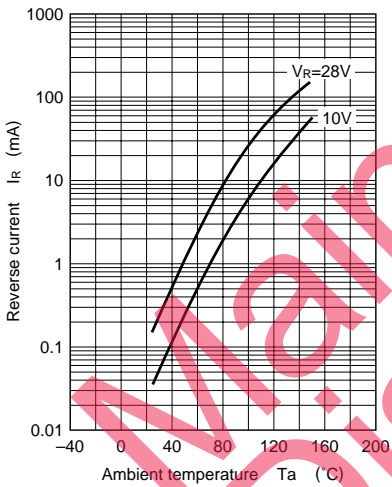
$I_R - V_R$



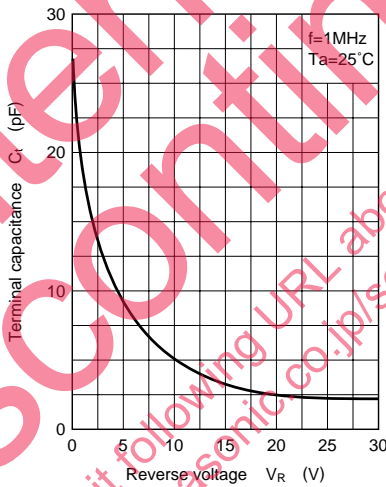
$V_F - T_a$



$I_R - T_a$

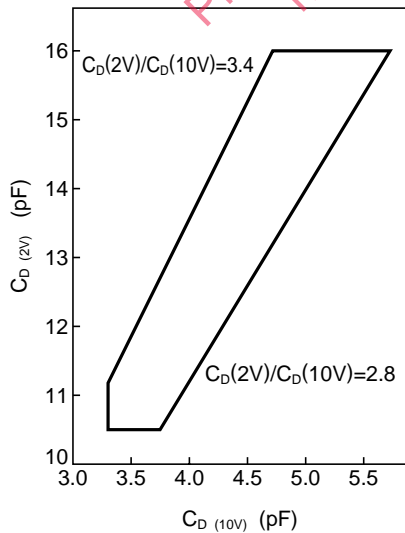


$C_D - V_R$

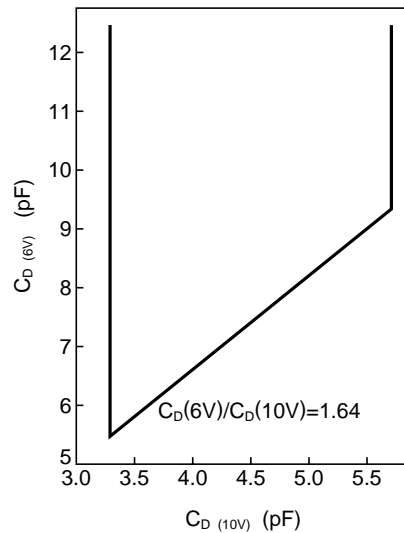


C_D rank classification

Primary rank classification



Secondary rank classification



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