

MA331

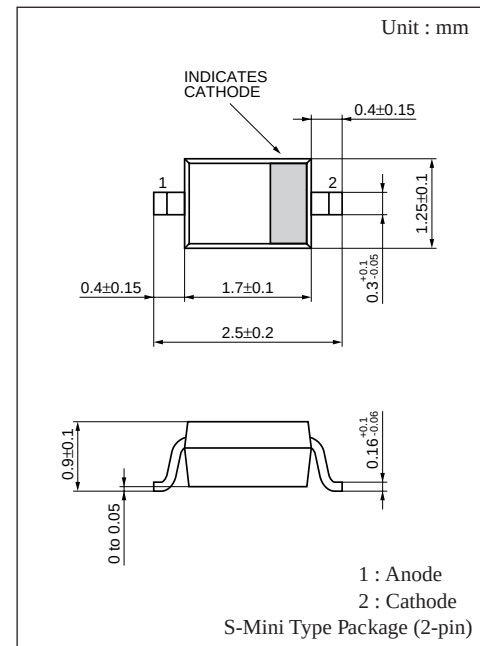
Silicon epitaxial planer type

■ Features

- Low series resistance $r_D = 0.18\Omega$ (typ.)
- Good linearity of $C - V$ curve
- Small package, optimum for down-sizing of equipment

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

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	12	V
Forward current (DC)	I_F	20	mA
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	- 55 to + 150	$^\circ\text{C}$



Marking Symbol : 6T

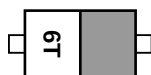
■ Electrical Characteristics ($T_a = 25^\circ\text{C}$)

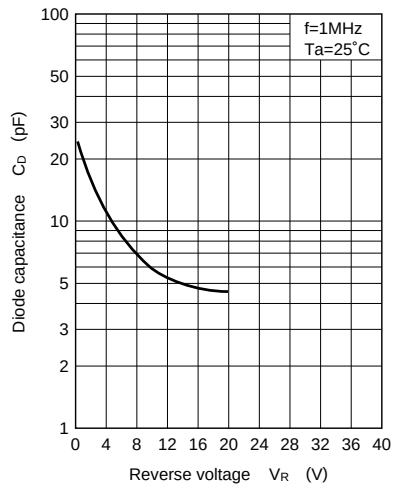
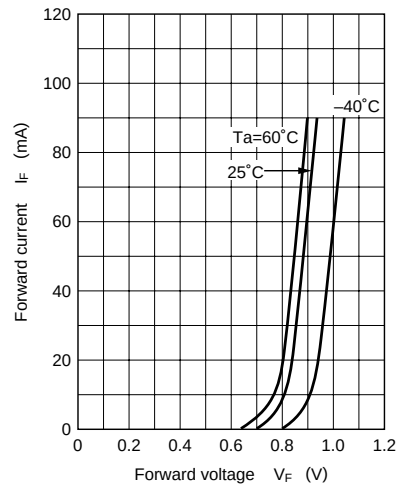
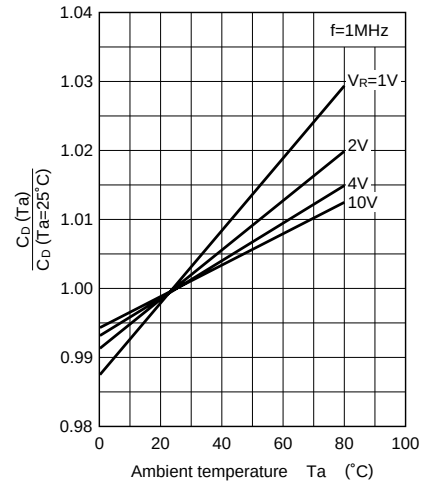
Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	I_R	$V_R = 12\text{V}$			10	nA
Diode capacitance	$C_{D(1V)}$	$V_R = 1\text{V}, f = 1\text{MHz}$	17.0		20.0	pF
	$C_{D(2V)}$	$V_R = 2\text{V}, f = 1\text{MHz}$	14.0	15.0	16.0	pF
	$C_{D(4V)}$	$V_R = 4\text{V}, f = 1\text{MHz}$	10.0		12.4	pF
	$C_{D(10V)}$	$V_R = 10\text{V}, f = 1\text{MHz}$	5.5	6.0	6.5	pF
Capacitance ratio	$C_{D(1V)}/C_{D(4V)}$		1.53	1.6	1.83	—
	$C_{D(2V)}/C_{D(10V)}$		2.25	2.5	2.75	—
Series resistance	r_D^*	$C_D = 9\text{pF}, f = 470\text{MHz}$		0.18	0.22	Ω

Note 1. Rated input/output frequency : 470MHz

2. r_D^* measurement device : YHP MODEL 4191A RF IMPEDANCE ANALYZER

■ Marking



$C_D - V_R$  $I_F - V_F$  $C_D - T_a$  $I_R - T_a$ 