MA10301

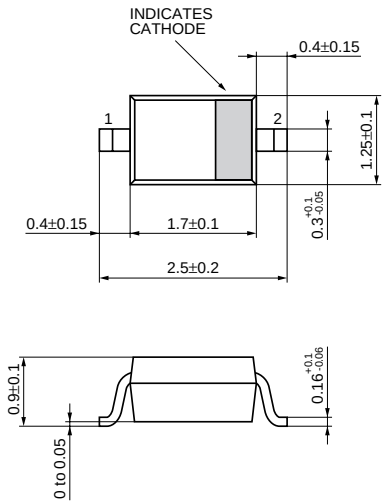
Silicon epitaxial planer type

For VCO

■ Features

- Good linearity and large capacity ratio of $V_R - C_D$
- Small series resistance r_D
- S-Mini package, enabling down-sizing of the equipment and automatic insertion through taping

Unit : mm



1 : Anode
2 : Cathode
S-Mini Type Package (2-pin)

Marking Symbol : 7U

■ Absolute Maximum Ratings (Ta= 25˚C)

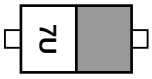
Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	15	V
Junction temperature	T_j	150	˚C
Storage temperature	T_{stg}	– 55 to + 150	˚C

■ Electrical Characteristics (Ta= 25˚C)

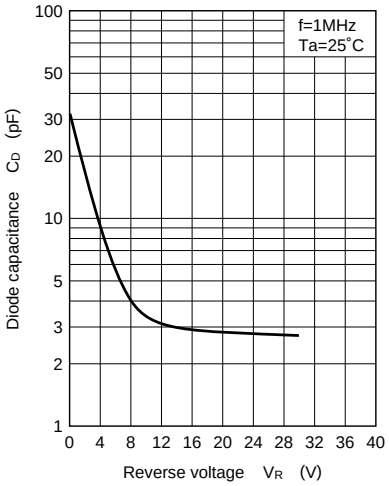
Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	I_R	V_R=10V			10	nA
Diode capacitance	$C_{D(1V)}$	V_R=1V, f=1MHz	19.5		23.5	pF
	$C_{D(2V)}$	V_R= 2V, f=1MHz	14.3		17.6	pF
Capacitance ratio	$C_{D(1V)}/C_{D(2V)}$		1.3			—
Series resistance	r_D*	V_R= 4V, f=100MHz			0.35	Ω

Note 1 : Rated input/output frequency : 100MHz
2 : * r_D measurement device : YHP MODEL 4191A RF IMPEDANCE ANALYZER

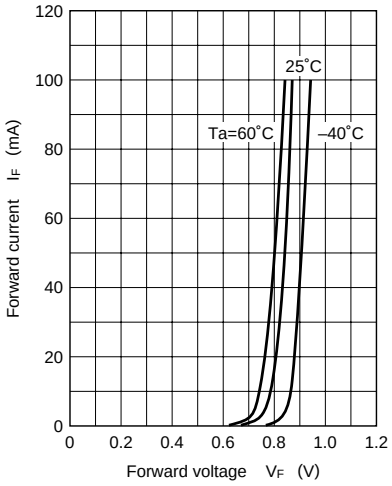
■ Marking



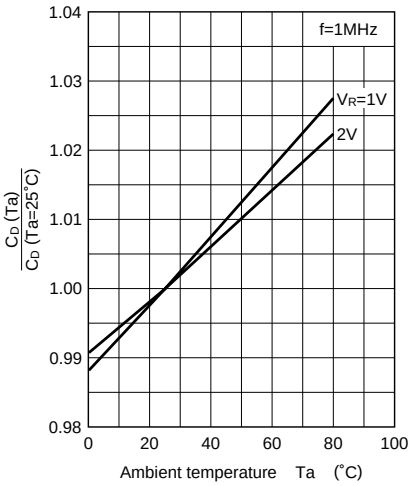
$C_D - V_R$



$I_F - V_F$



$C_D - Ta$



$I_R - Ta$