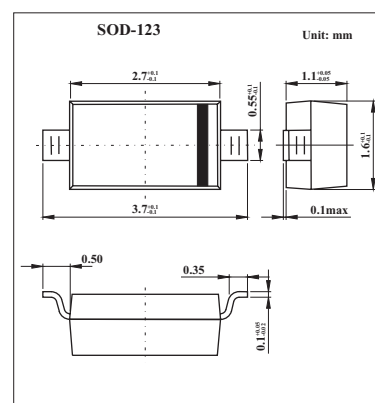


Variable Capacitance Diode for VCXO

HVD359

■ Features

- High capacitance ratio and good C-V linearity.
- To be usable at low voltage.
- Super small Flat Lead Package (SFP) is suitable for surface mount design.

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

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	15	V
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Min	Max	Unit
Reverse current	I_{R1}	$V_R = 10\text{ V}$		10	nA
	I_{R2}	$V_R = 10\text{ V}, T_a = 60^\circ\text{C}$		100	
Capacitance	C_1	$V_R = 1\text{ V}, f = 1\text{ MHz}$	24.8	29.8	pF
	C_4	$V_R = 4\text{ V}, f = 1\text{ MHz}$	6	8.3	
Capacitance ratio	n	C_1 / C_4	3		
Series resistance	r_s	$V_R = 4\text{ V}, f = 100\text{ MHz}$		1.5	Ω
ESD-Capability *1		$C = 200\text{ pF}, R = 0\ \Omega$, Both forward and reverse direction 1 pulse.	80		V

Note:

1. Failure criterion ; $I_R \geq 20\text{ nA}$ at $V_R = 10\text{ V}$

■ Marking

Marking	G
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