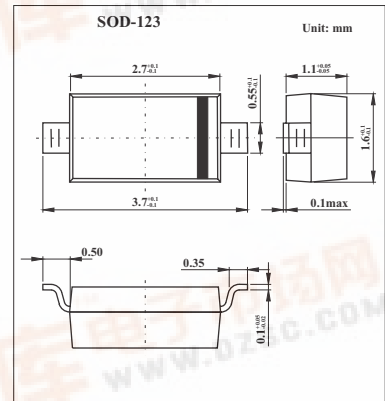


SMD Type Diodes

Variable Capacitance Diode for AM tuner
HVR100

Features

- High capacitance ratio. (n =16.0 min)
- High figure of merit. (Q =200 min)
- To be usable at low voltage.
- Small Resin Package (SRP) is suitable for surface mount design.



Absolute Maximum Ratings Ta = 25 °C

Parameter	Symbol	Value	Unit
Reverse Voltage	V _R	15	V
Junction temperature	T _j	125	°C
Storage temperature	T _{stg}	-55 to +125	°C

Electrical Characteristics Ta = 25 °C

Parameter	Symbol	Conditions	Min	Max	Unit
Reverse voltage	V _R	I _R = 10 μ A	15		V
Reverse current	I _R	V _R = 9 V		100	nA
Capacitance	C ₁	V _R = 1 V, f = 1 MHz	421.5	524.6	pF
	C ₃	V _R = 3 V, f = 1 MHz	182	275.7	
	C ₅	V _R = 5 V, f = 1 MHz	73.2	121.4	
	C ₆	V _R = 6 V, f = 1 MHz	42.2	72.2	
	C ₇	V _R = 7 V, f = 1 MHz	26.2	41.6	
	C ₈	V _R = 8 V, f = 1 MHz	20.4	28.2	
Capacitance ratio	n	C ₁ / C ₈	16		
Figure of merit	Q	C = 450pF, f = 1 MHz	200		
Matching error	ΔC/C ⁻¹	V _R = 1 to 8V		3.0	%
ESD-Capability ^{*1}		C=200pF , Both forward and reverse direction 1 pulse.	80		V

Notes

1.Failure criterion ; I_R ≥ 100nA at V_R =9 V

Marking

Marking	2
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