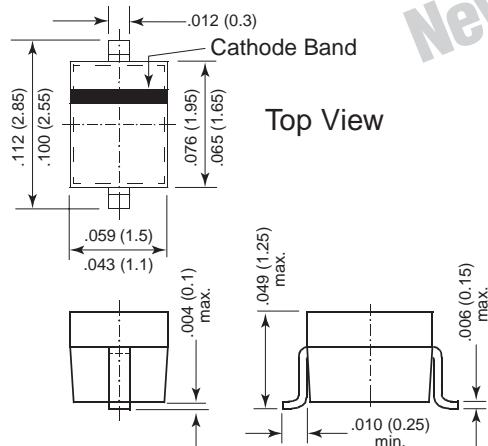
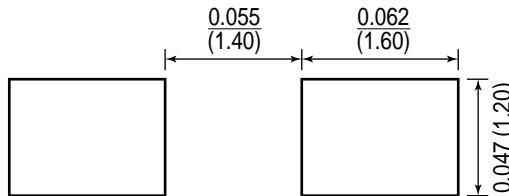



SOD-323

Dimensions in inches and (millimeters)

Mounting Pad Layout



Features

- Low turn-on voltage
- Low capacitance
- Ultrafast switching
- Microminiature plastic package
- Single, double, and ring balanced mixer in narrow-band receivers up to 1 GHz
- Detectors and fast switching up to 1 GHz
- Phase detectors
- Suitable for radios, TV, CTV, and hyper band tuners

Mechanical Data

Case: SOD-323 Plastic Package

Weight: approx. 0.004g

Marking Code: L5

Packaging Codes – Options:

D5 – 10K per 13" reel (8mm tape), 30K/box

D6 – 3K per 7" reel (8mm tape), 30K/box

Maximum Ratings and Thermal Characteristics

($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	10	V
Forward Current	I_F	3	A
Peak Forward Surge Current	I_{FSM}	5	A
Power Dissipation $T_s = 28^\circ\text{C}$	P_{tot}	1350	mW
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_s	-55 to +150	$^\circ\text{C}$
Thermal Resistance Junction to Ambient Air ⁽¹⁾	$R_{\Theta JA}$	200	$^\circ\text{C}/\text{W}$
Thermal Resistance Junction to Soldering Point	$R_{\Theta JS}$	90	$^\circ\text{C}/\text{W}$

Electrical Characteristics

($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Maximum Forward Voltage at $I_F = 10\text{mA}$ at $I_F = 100\text{mA}$ at $I_F = 1.0\text{A}$	V_F	0.24 0.32 0.49	V
Maximum DC Reverse Current at $V_R = 5\text{V}$, $T_A = 25^\circ\text{C}$ at $V_R = 8\text{V}$, $T_A = 80^\circ\text{C}$	I_R	8 600	μA

Note:

(1) Device mounted on epoxy PCB 40mm x 40mm x 1.5mm, 0.5cm² Cu.