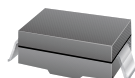
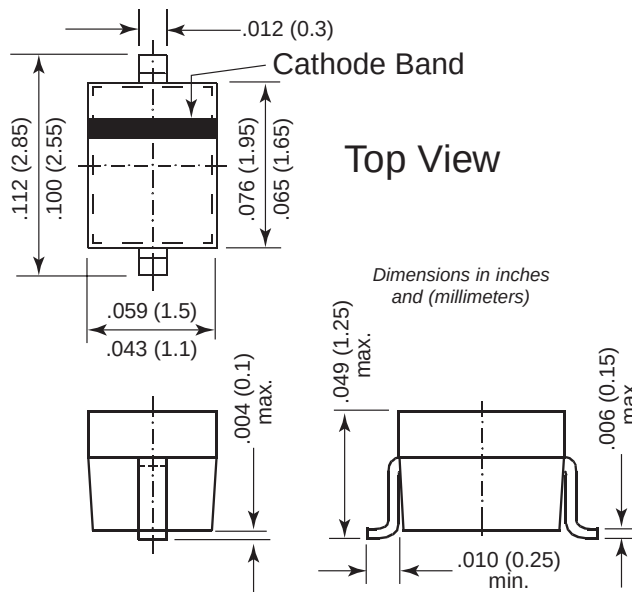


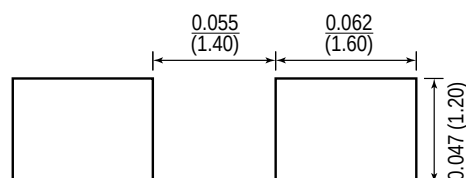
High-Voltage Small-Signal Switching Diode



SOD-323



Mounting Pad Layout



Mechanical Data

Case: SOD-323 Plastic Package

Weight: approx. 0.004g

Marking Code: B6

Packaging Codes/Options:

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

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

Features

- Silicon Epitaxial Planar Diode
- Fast switching diode, especially suited for applications requiring high voltage capability

Maximum Ratings and Thermal Characteristics

T_A = 25°C unless otherwise noted

Parameter	Symbol	Value	Unit
Continuous Reverse Voltage	V _R	240	V
Peak Repetitive Reverse Voltage	V _{RRM}	300	V
Peak Repetitive Reverse Current	I _{RRM}	200	mA
Forward Current (continuous)	I _F	225	mA
Peak Repetitive Forward Current	I _{FRM}	625	mA
Non-Repetitive Peak Forward Current at t _p = 1μs at t _p = 1s	I _{FSM}	4.0 1.0	A
Power Dissipation	P _{tot}	200 ⁽¹⁾	mW
Typical Thermal Resistance Junction to Ambient Air	R _{θJA}	650 ⁽¹⁾	°C/W
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _s	-65 to +150	°C

Note: (1) Device on Fiberglass Substrate, see layout on second page

Electrical Characteristics

T_J = 25°C unless otherwise noted

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	V _{BR}	I _R = 100μA	300	—	—	V
Leakage Current	I _R	V _R = 240V V _R = 240V, T _J = 150°C	— —	— —	100 100	nA μA
Forward Voltage	V _F	I _F = 20mA I _F = 100mA	— —	0.83 —	0.87 1.00	V
Capacitance	C _{tot}	V _F = V _R = 0 f = 1MHz	—	—	5.0	pF
Reverse Recovery Time	t _{rr}	I _F = I _A = 30mA I _{rr} = 3.0mA, R _L = 100Ω	—	—	50	ns

Note:

(1)Device on fiberglass substrate, see layout