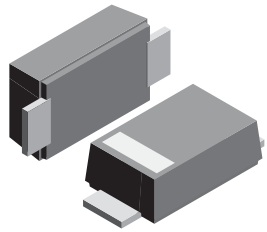
GSD2004WS

SURFACE MOUNT FAST SWITCHING DIODE



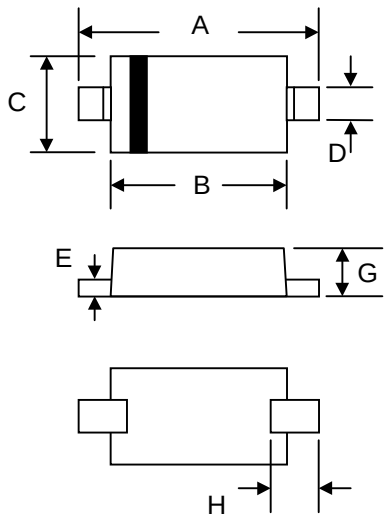
Features

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

Mechanical Data

- Case: SOD-323, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.004 grams (approx.)
- Marking: A3

RoHS COMPLIANT



SOD-323		
Dim	**Min**	**Max**
A	2.30	2.70
B	1.75	1.95
C	1.15	1.35
D	0.25	0.35
E	0.05	0.15
G	0.70	0.95
H	0.30	—
All Dimensions in mm		

Maximum Ratings @ T_A = 25°C unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Continuous reverse voltage		V_R	240	V
Peak repetitive reverse voltage		V_{RRM}	300	V
Forward current (continuous)		I_F	225	mA
Peak repetitive forward current		I_{FRM}	625	mA
Non-repetitive peak forward current	t_p = 1 µs	I_{FSM}	4.0	A
	t_p = 1 s	I_{FSM}	1.0	A
Power dissipation		P_{tot}	200[1)]	mW

[1)] Device on Fiberglass Substrate, see layout on second page

Thermal Characteristics T_{amb} = 25 °C, unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Typical thermal resistance junction to ambient air		R_{thJA}	650[1)]	°C/W
Junction temperature		T_j	150	°C
Storage temperature range		T_S	- 65 to + 150	°C

[1)] Device on Fiberglass Substrate, see layout on second page

Electrical Characteristics T_{amb} = 25 °C, unless otherwise specified

Parameter	Test condition	Symbol	Min	Typ.	Max	Unit
Reverse breakdown voltage	I_R = 100 µA	V_{BR}	300			V
Leakage current	V_R = 240 V	I_R			100	nA
	V_R = 240 V, T_j = 150 °C	I_R			100	µA
Forward voltage	I_F = 20 mA	V_F		0.83	0.87	V
	I_F = 100 mA	V_F			1.00	V
Diode capacitance	V_F = V_R = 0, f = 1 MHz	C_{tot}			5.0	pF
Reverse recovery time	I_F = I_R = 30 mA, I_{rr} = 3.0 mA, R_L = 100 Ω	t_{rr}			50	ns

[1)] Device on Fiberglass Substrate, see layout