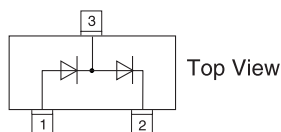
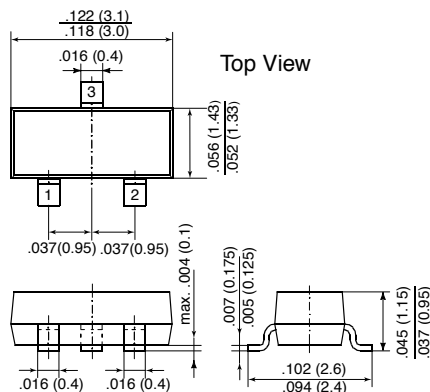


GSD2004S

SMALL SIGNAL DIODES

SOT-23



Dimensions in inches and (millimeters)

FEATURES

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



MECHANICAL DATA

Case: SOT-23 (TO-236AB) Plastic Package

Weight: approx. 0.008 g

Marking Code: DB6

MAXIMUM RATINGS AND THERMAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified (per diode)

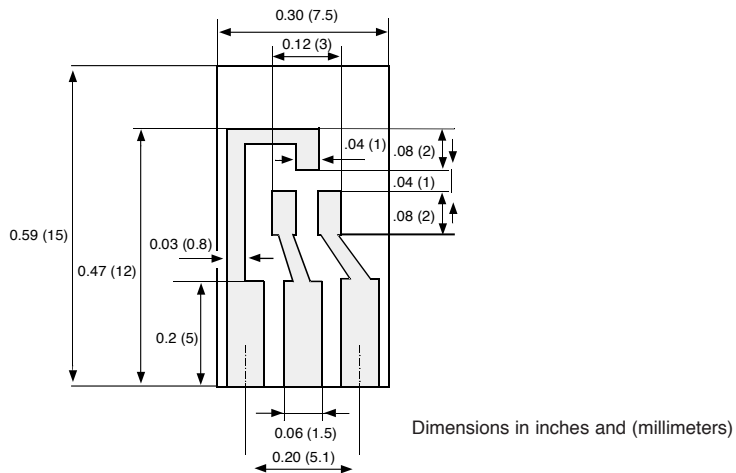
	SYMBOL	VALUE	UNIT
Continuous Reverse Voltage	V_R	240	Volts
Peak Repetitive Reverse Voltage	V_{RRM}	300	Volts
Peak Repetitive Reverse Current	I_o	200	mA
Continuous Forward Current	I_F	225	mA
Peak Repetitive Forward Current	I_{RFM}	625	mA
Non-Repetitive Peak Forward Current	I_{FSM}	4.0	A
at $t_p = 1 \mu s$	I_{FSM}	1.0	A
at $t_p = 1 s$			
Power Dissipation	P_{tot}	350	mW
Maximum Junction Temperature	T_j	150	°C
Storage Temperature Range	T_s	-65 to +150	°C
Typical Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	357	°C/W

GSD2004S

ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified (per diode).

	SYMBOL	MIN.	TYP.	MAX.	UNIT
Reverse Breakdown Voltage at $I_R=100\mu A$	V_{BR}	300	-	-	Volts
Leakage Current at $V_R = 240 V$ at $V_R = 240 V$, $T_j = 150^\circ C$	I_R	-	-	100	nA
	I_R	-	-	100	μA
Forward Voltage at $I_F = 20 mA$ at $I_F = 100 mA$	V_F	-	0.83	0.87	Volts
	V_F	-	-	1.00	Volts
Capactiance at $V_F = V_R = 0$; $f = 1MHz$	C_{tot}	-	-	5.0	pF
Reverse Recovery Time $I_F = I_A = 30 mA$, $I_{rr} = 3.0 mA$ $R_L = 100 \Omega$	t_{rr}	-	-	50	ns



Layout for R_{thJA} test

Thickness: Fiberglass 0.059 in (1.5 mm)
Copper leads 0.012 in (0.3 mm)