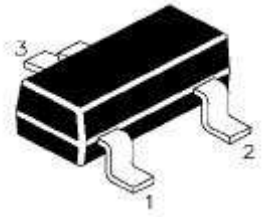
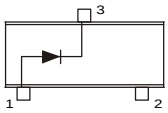
SILICON EXPITAXIAL PLANAR SWITCHING DIODE

BAS16W

SOT-323
PLASTIC PACKAGE





Pin Configuration
1 = ANODE
2 = NC
3 = CATHODE

Marking
BAS16W = A6

High Switching Diode

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Continuous Reverse Voltage	V_R	75	V
Repetitive Peak Reverse Voltage	V_{RRM}	85	V
Forward Current (Continuous)	*I_F	175	mA
Repetitive Peak Forward Voltage	I_{FRM}	500	mA
Non Repetitive Peak Forward Current, square wave T_j=25ºC prior to surge			
t=1µs	I_{FSM}	4.0	A
t=1ms	I_{FSM}	1.0	A
t=1s	I_{FSM}	0.5	A
Power Dissipation at T_{amb}=25ºC	*P_{tot}	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 65 to +150	°C

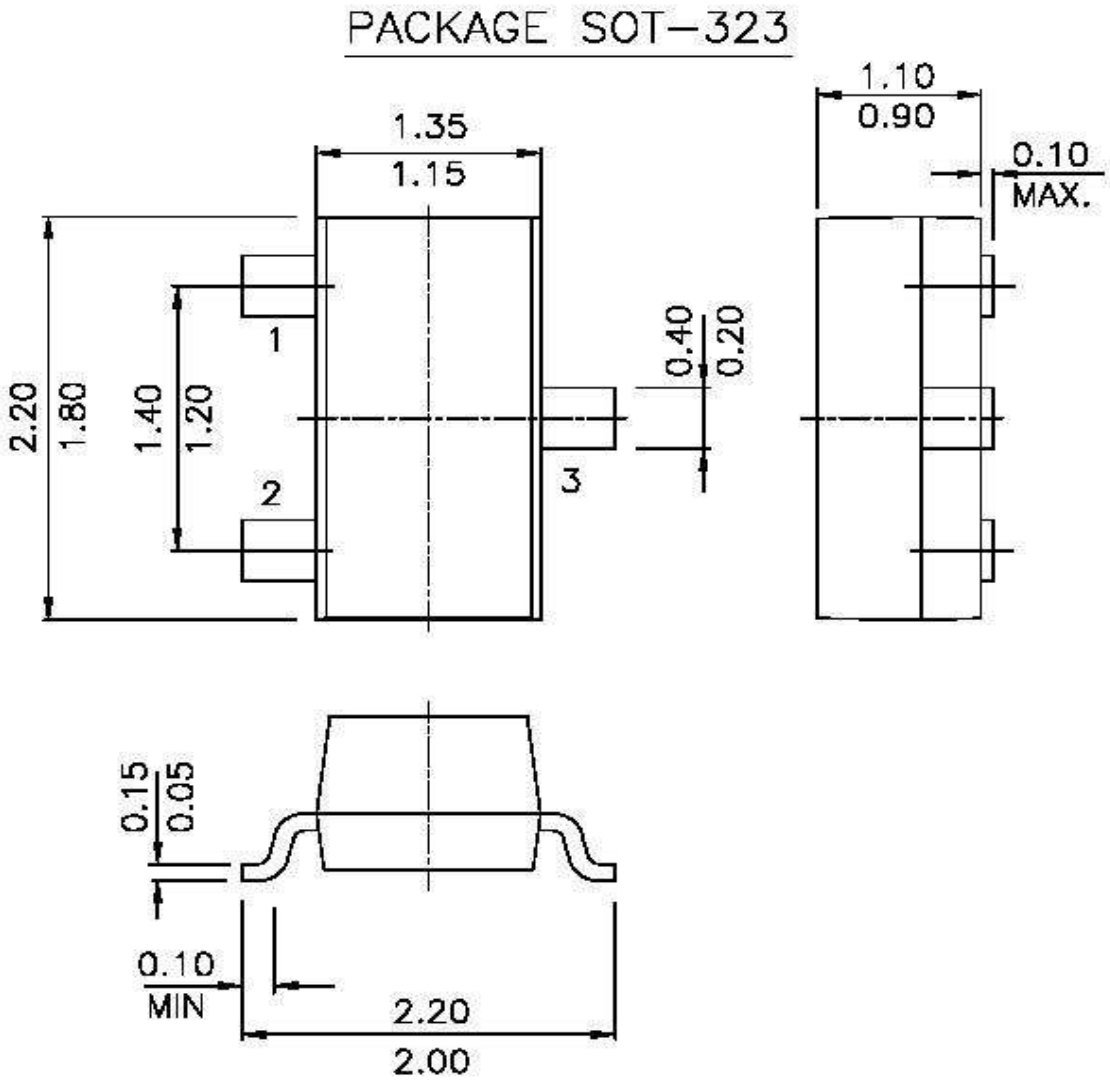
THERMAL RESISTANCE

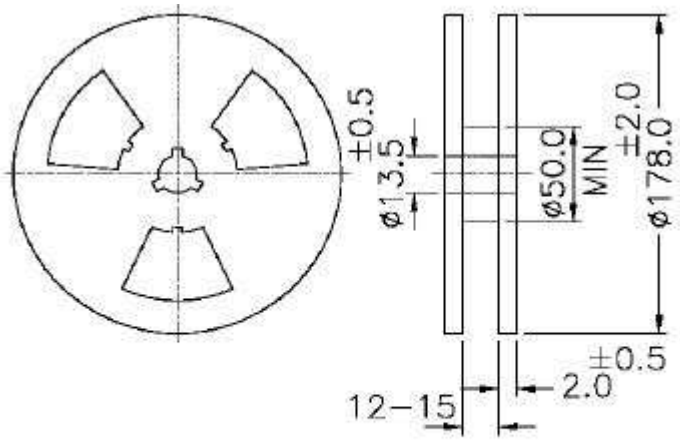
Junction to tie point	$R_{th\ (j\text{-}tp)}$	300	K/W
Junction to Ambient in free air	*$R_{th\ (j\text{-}a)}$	625	K/W

***Device mounted on an FR4 printed circuit board**

ELECTRICAL CHARACTERISTICS (T_j=25ºC unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Forward Voltage	V_F	I_F=1mA			0.715	V
		I_F=10mA			0.855	V
		I_F=50mA			1.0	V
		I_F=150mA			1.25	V
Reverse Voltage Leakage Current	I_R	V_R=25V			30	nA
		V_R=75V			1.0	µA
		V_R=25V, T_j=150ºC			30	µA
		V_R=75V, T_j=150ºC			50	µA
Diode Capacitance	C_d	V_R=0V, f=1MHz			2.0	pF
Reverse Recovery Time When Switched from	t_{rr}	I_F=10mA to I_R=60mA, R_L100 Ω, Measured at I_R=1mA			4.0	ns
Forward Recovery Voltage	V_{fr}	when switched from I_F=10mA to t_r=20ns			1.75	V





ALL DIMENSIONS ARE IN mm
REEL ø 178 mm (7")
3000 Pcs / REEL

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Disclaimer

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