

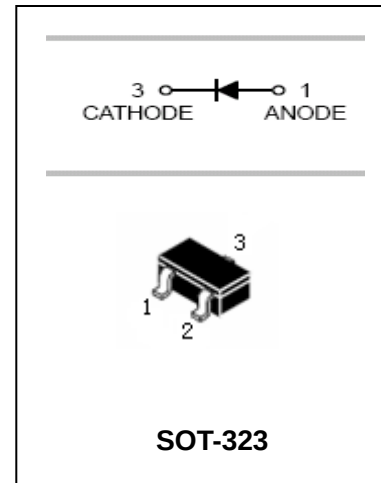
Surface Mount Switching Diode

BAS16W

FEATURES

- Fast switching speed
- High conductance
- For general purpose switching applications
- Surface mount package ideally suited for automatic insertion

HF



APPLICATIONS

- For general purpose switching applications

ORDERING INFORMATION

Type No.	Marking	Package Code
BAS16W	A2	SOT-323

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Pek Repetitive Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Average Rectified Output Current	I_O	150	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	2.0	A
@t=1μS		1.0	
@t=1S			
Power Dissipation	P_d	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625	°C/W
Operating and Storage temperature range	T_j T_{stg}	-65 to +150	°C

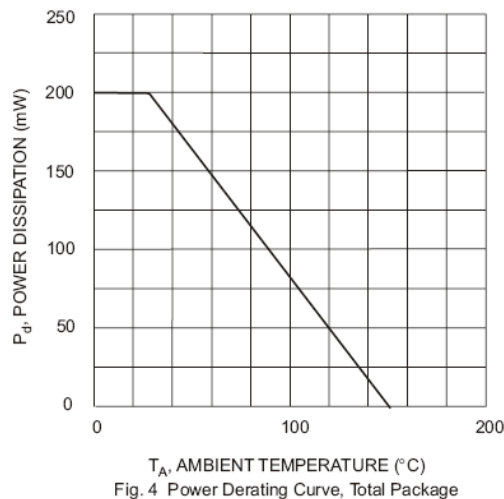
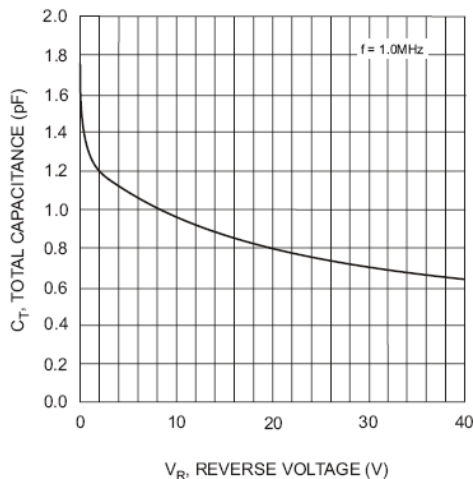
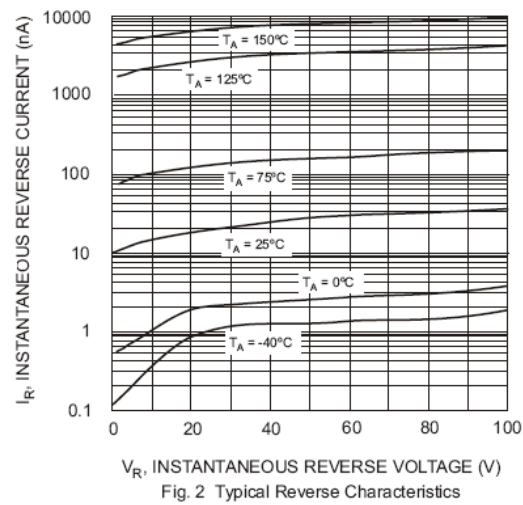
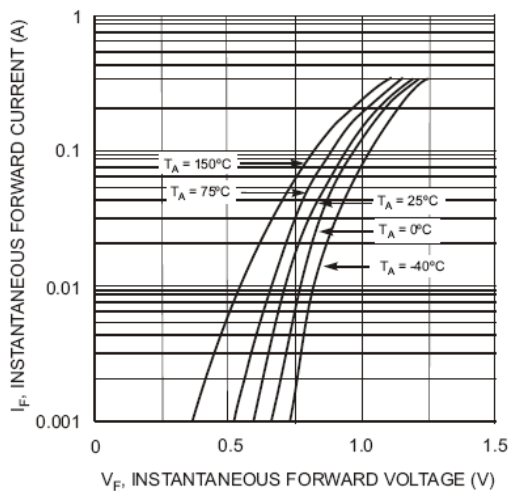
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ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R = 1\mu\text{A}$	75		V
Reverse voltage leakage current	I_R	$V_R=20\text{V}$ $V_R=75\text{V}$		25 1	nA μA
Forward voltage	V_F	$I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=50\text{mA}$ $I_F=150\text{mA}$		715 855 1000 1250	mV
Diode capacitance	C_D	$V_R=0\text{V}$ $f=1\text{MHz}$		2	pF
Reverse recovery time	t_{rr}	$I_F=I_R=10\text{mA}$ $R_L=100\Omega$		4	nS

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified



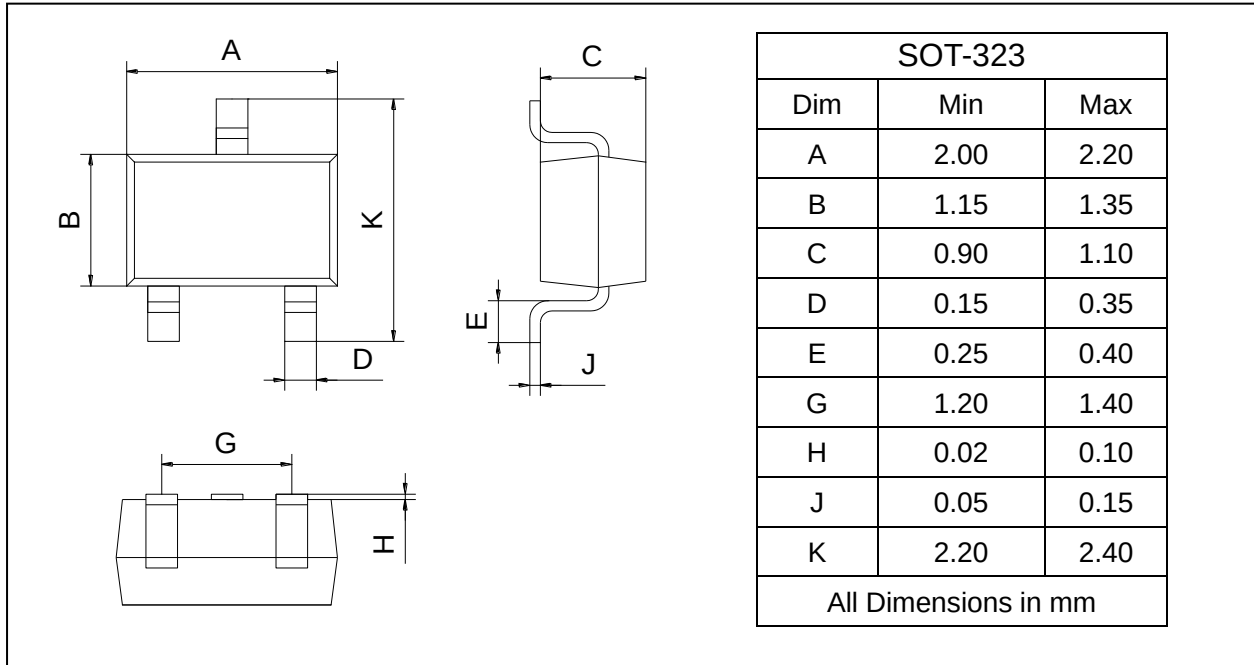
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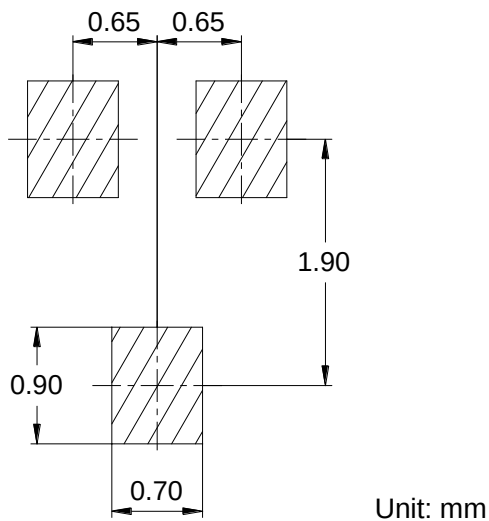
PACKAGE OUTLINE

Plastic surface mounted package

SOT-323



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
BAS16W	SOT-323	3000pcs / Tape & Reel