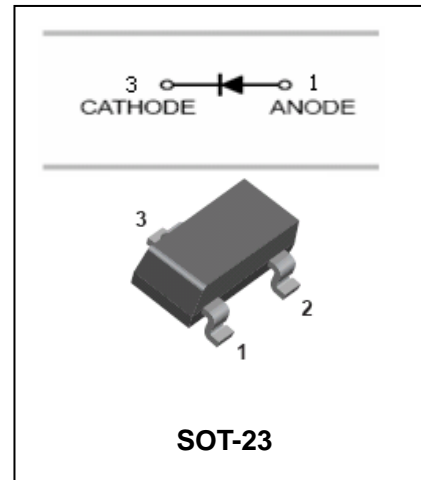


Surface mount switching diode

BAS16

FEATURES

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



APPLICATIONS

- High speed switching application.

ORDERING INFORMATION

Type No.	Marking	Package Code
BAS16	A6	SOT-23

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Limits	Unit
Non-Repetitive peak reverse voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}		
DC Reverse Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	300	mA
Average rectified output Current	I_O	150	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	2.0	A
@t=1.0μs			
@t=1.0s			
Power Dissipation	P_d	350	mW
Thermal Resistance Junction to Ambient Air	$R_{θJA}$	375	°C/W
Operating Junction Temperature Range	T_j	150	°C
Storage Temperature Range	T_{STG}	-65 to +150	°C

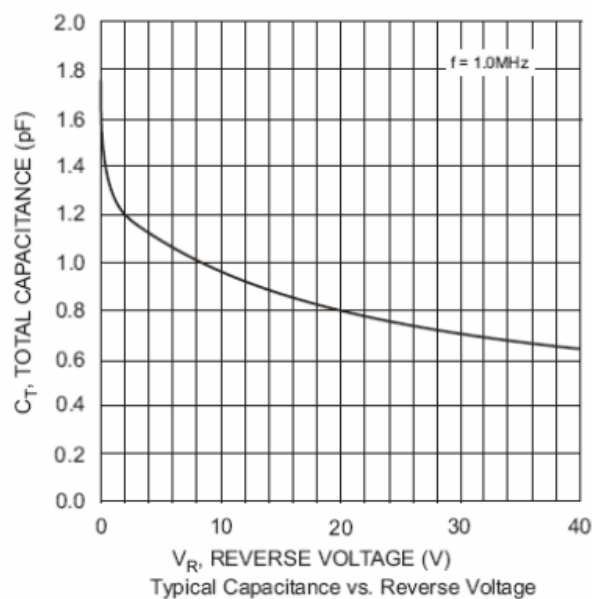
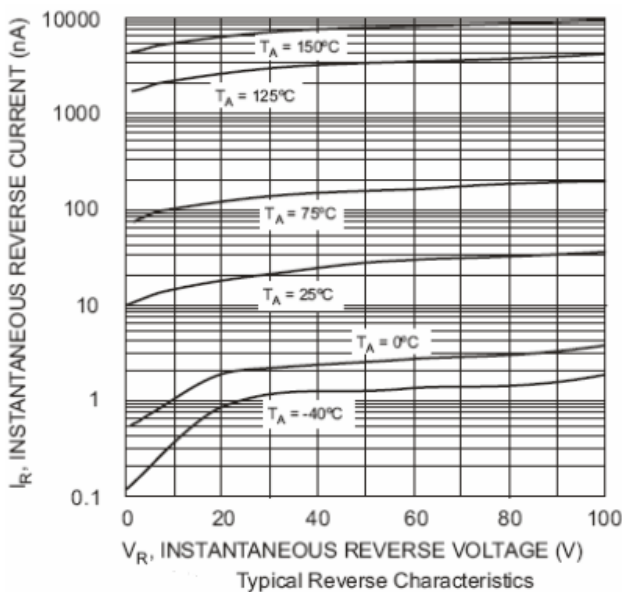
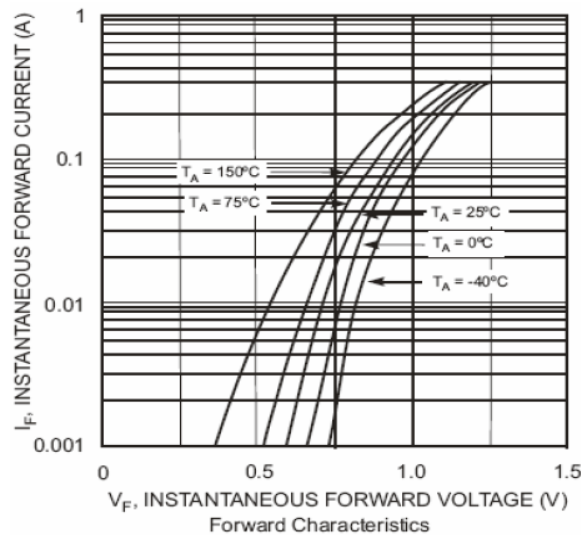
Surface mount switching diode

BAS16

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	MAX	UNIT	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	75	-	-	V	$I_R=100\mu A$
Forward Voltage	V_{FM}	-	-	0.715 0.855 1.0 1.25	V	$I_F=1mA$ $I_F=10mA$ $I_F=50mA$ $I_F=150mA$
Reverse Leakage Current	I_R	-	-	1.0	μA	$V_R=75V$
Junction Capacitance	C_j	-	2	-	pF	$V_R=0V, f=1.0MHz$
Reverse Recovery Time	t_{rr}	-	-	6-	ns	$I_F=I_R=10mA, I_{rr}=0.1 \cdot I_R$

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



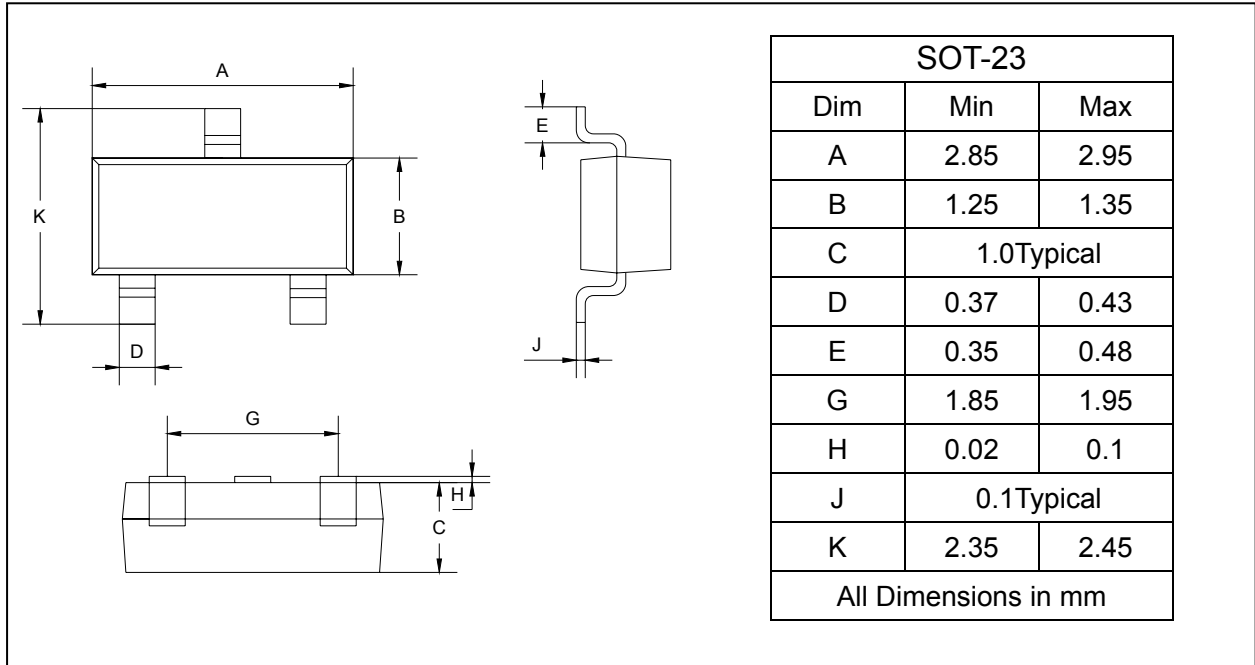
Surface mount switching diode

BAS16

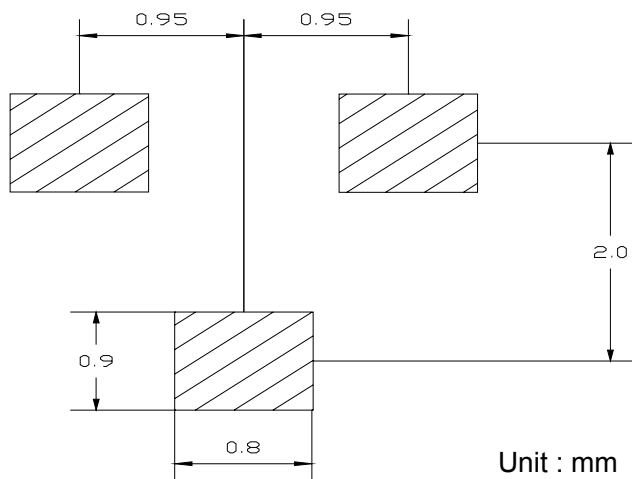
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
BAS16	SOT-23	3000/Tape&Reel