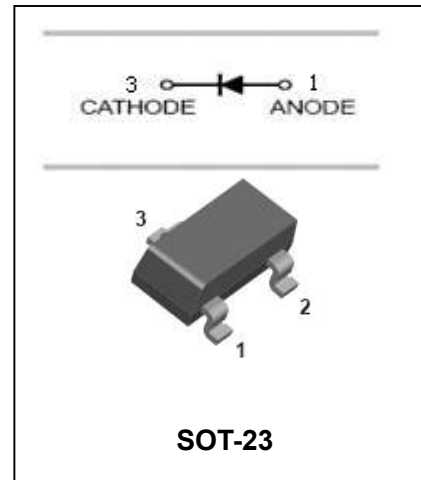


Surface mount switching diode

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

□: none is for Lead Free package;

“G” is for Halogen Free package.

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Limits	Unit
Repetitive Peak reverse voltage	V_{RM}	85	V
DC Reverse Voltage	V_R	75	V
Forward Continuous Current	I_F	250	mA
Non-Repetitive Peak Forward Surge Current @t=1.0μs	I_{FSM}	4.5	A
Power Dissipation $T_S=54^\circ\text{C}$	P_d	370	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	375	$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150	$^\circ\text{C}$

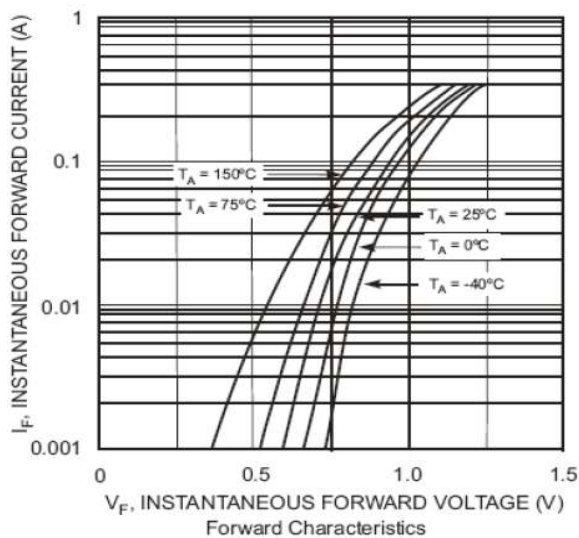
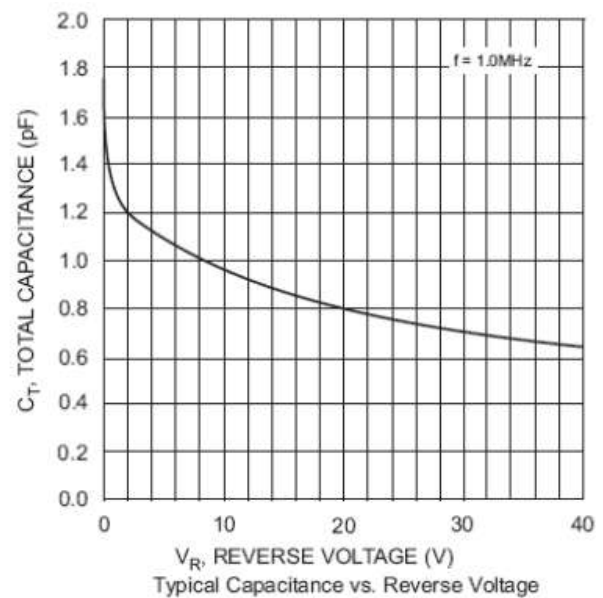
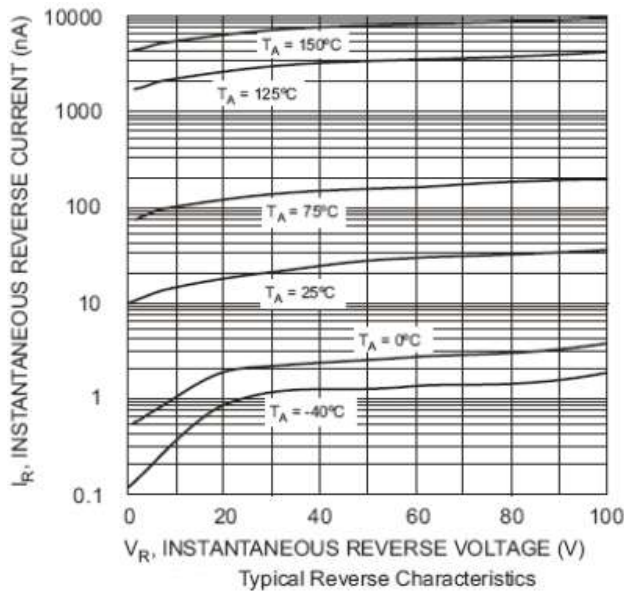
Surface mount switching diode

BAS16

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

Characteristic	Symbol	Min	Typ	MAX	UNIT	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	75	-	-	V	$I_R=100\mu\text{A}$
Forward Voltage	V_{FM}	-	-	0.715 0.855 1.0 1.25	V	$I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=50\text{mA}$ $I_F=150\text{mA}$
Reverse Leakage Current	I_R	-	-	1.0	μA	$V_R=70\text{V}$
Junction Capacitance	C_j	-	-	2	pF	$V_R=0\text{V}, f=1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	-	-	4	ns	$I_F=I_R=10\text{mA}, R_L=100\Omega$

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



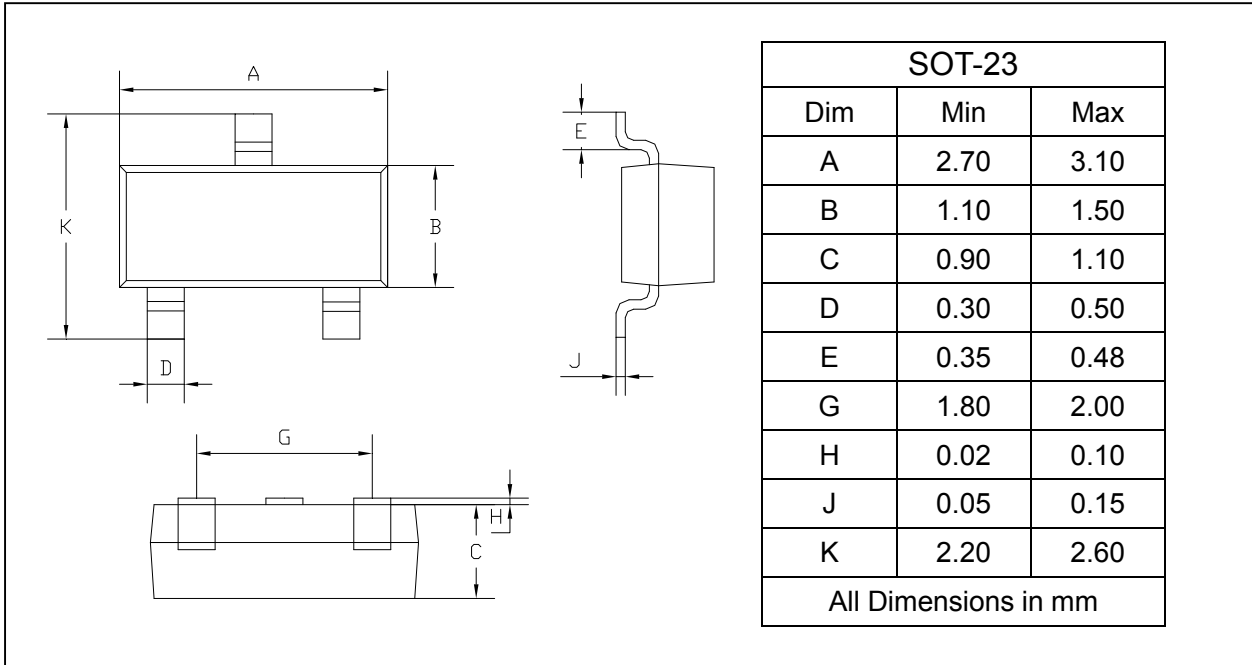
Surface mount switching diode

BAS16

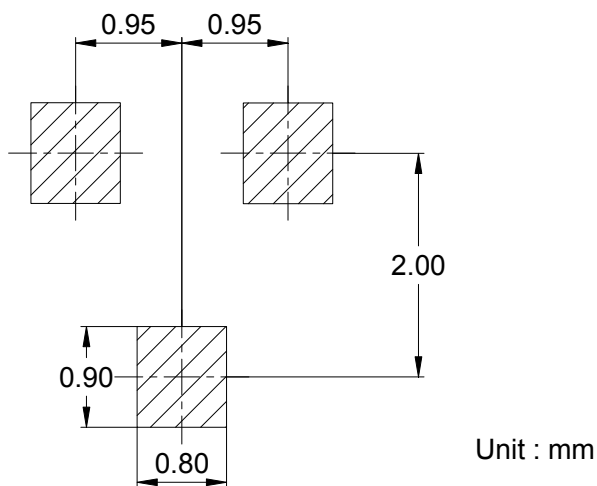
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

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