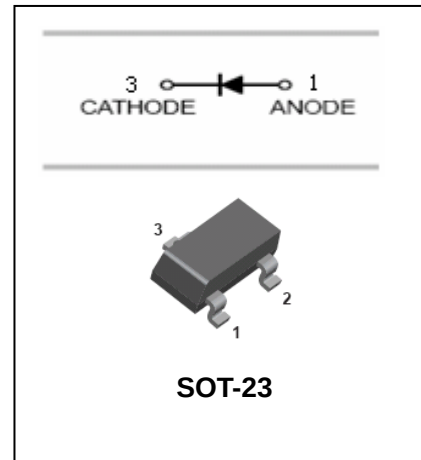


Surface mount switching diode**BAS116****FEATURES**

- Low leakage current applications.
- Medium speed switching times.
- Surface mount package ideally suited for automatic Insertion.

**APPLICATIONS**

- High speed switching application.

ORDERING INFORMATION

Type No.	Marking	Package Code
BAS116	JV	SOT-23

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Limits	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	85	V
Working Peak Reverse Voltage	V_{RWM}		
DC Reverse Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	60	V
Forward Continuous Current	I_{FM}	215	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current @t=1.0μs @t=1.0ms @t=1.0s	I_{FSM}	4.0 1.0 0.5	A
Power Dissipation	P_d	250	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	500	°C/W
Operating Junction Temperature Range	T_j	150	°C
Storage Temperature Range	T_{STG}	-65 to +150	°C

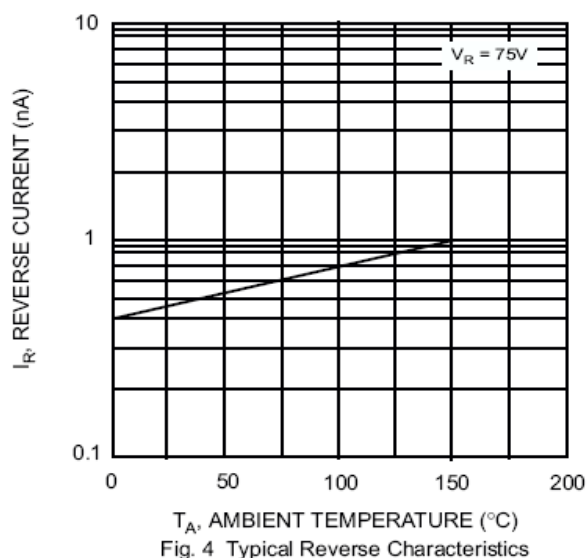
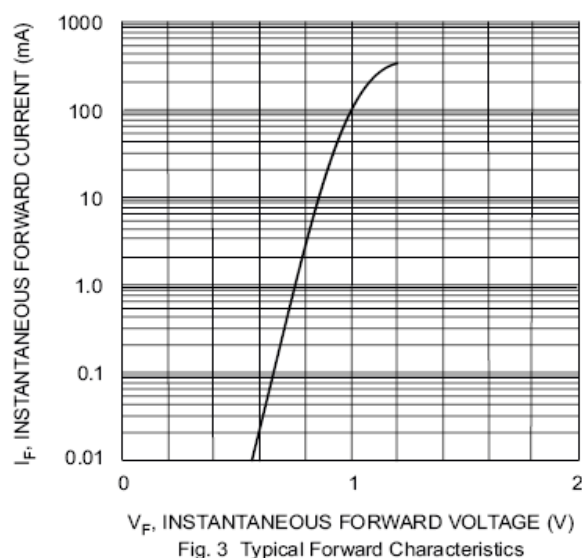
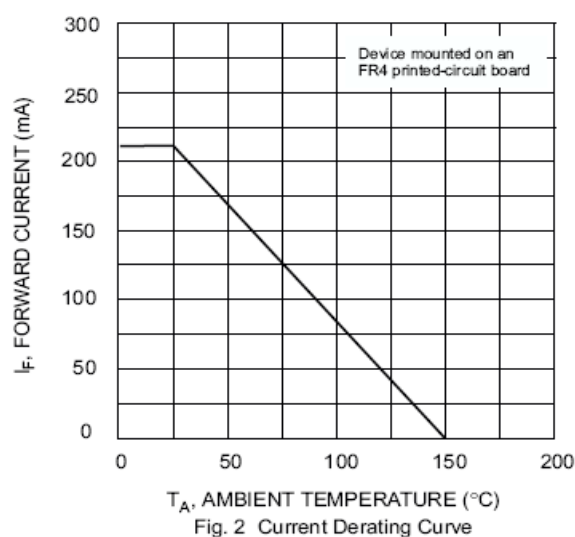
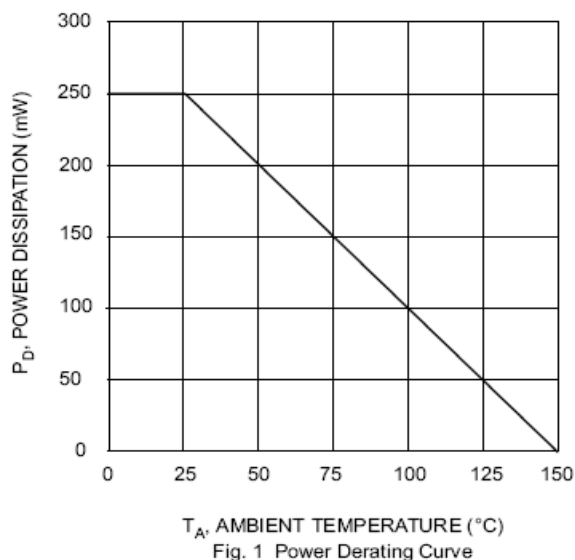
Surface mount switching diode

BAS116

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

Characteristic	Symbol	Min	Typ	MAX	UNIT	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	85	-	-	V	$I_R=100\mu\text{A}$
Forward Voltage	V_{FM}	-	-	0.9 1.0 1.1 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	-	-	5.0	nA	$V_R=75\text{V}$
Junction Capacitance	C_j	-	2	-	pF	$V_R=0\text{V}, f=1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	-	-	-	ns	$I_F=I_R=10\text{mA}, I_R=0.1*I_R$

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



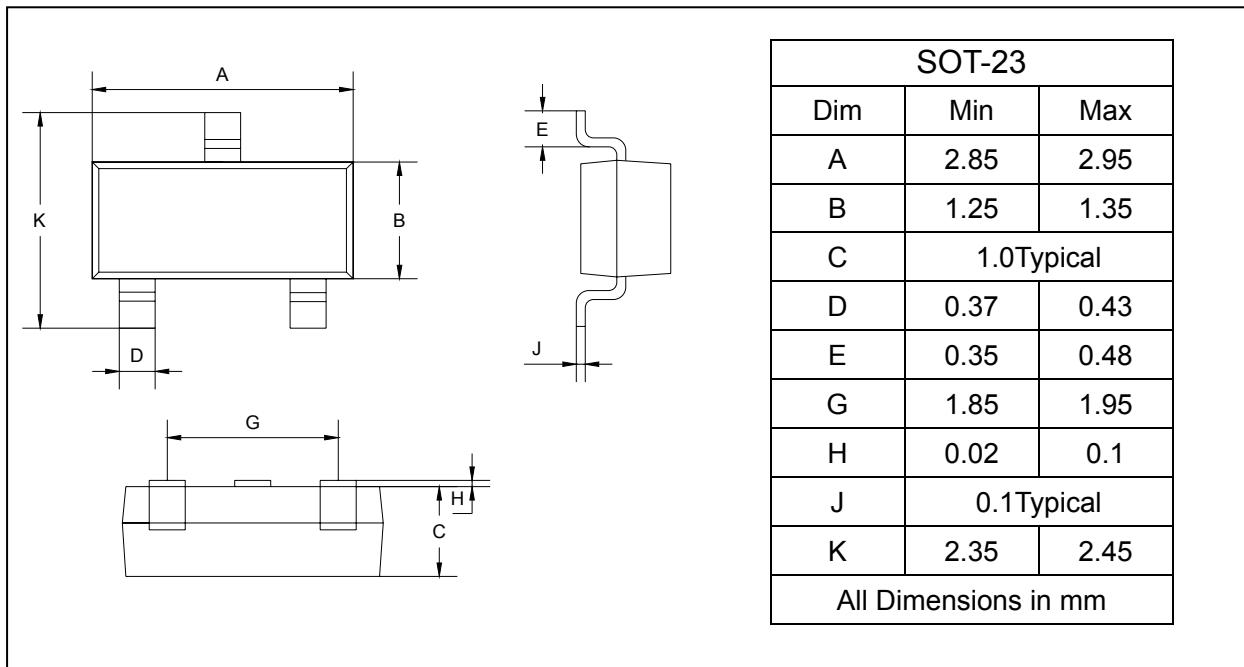
Surface mount switching diode

BAS116

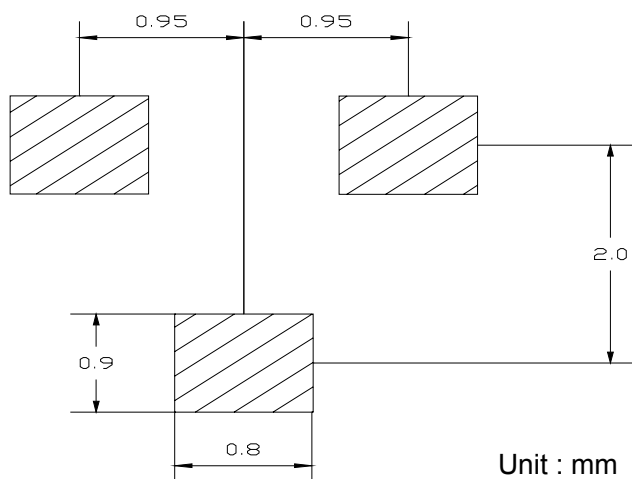
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
BAS116	SOT-23	3000/Tape&Reel