

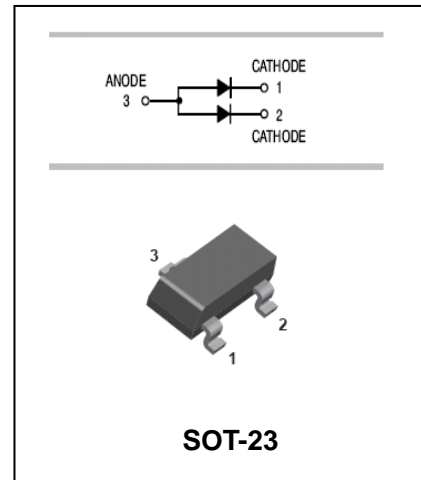


Surface mount switching diode

BAW156

FEATURES

- Very Low Leakage Current.
- Surface Mount Package Ideally Suited for Automatic Insertion.



APPLICATIONS

- High speed switching application.

ORDERING INFORMATION

Type No.	Marking	Package Code
BAW156	K53	SOT-23

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Limits	Unit
Non-repetitive peak reverse voltage	V_{RM}	60	V
Peak Repetitive Reverse Voltage	V_{RRM}	85	V
Working peak reverse voltage	V_{RWM}		
DC Reverse Voltage	V_R		
Continuous Forward Current	I_F	160	mA
Single diode loaded		140	
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-repetitive forward Surge Current	I_{FSM}	4	A
@t=1.0us		1	
@t=1.0ms		0.5	
Power Dissipation	P_D	250	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	500	°C/W
Operating And Storage Temperature Range	T_J, T_{STG}	-65 to +150	°C



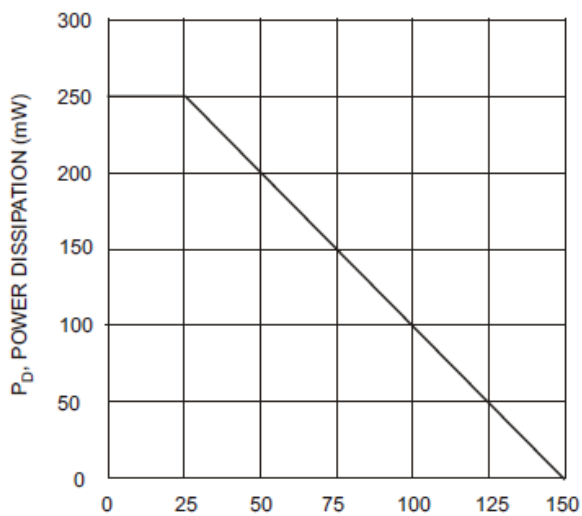
Surface mount switching diode

BAW156

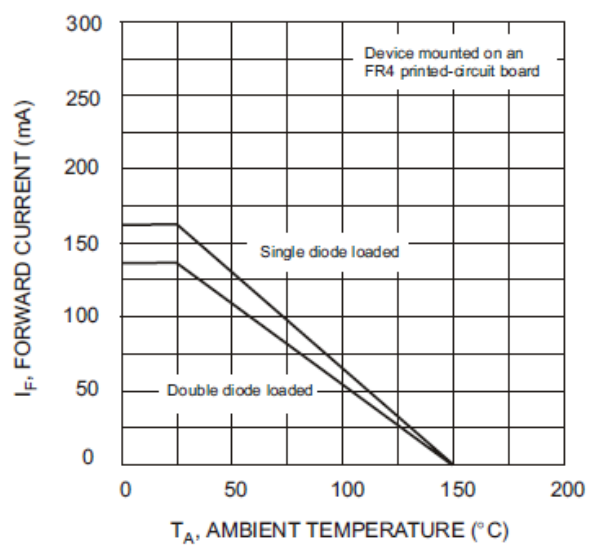
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	MAX	UNIT	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	85	-	-	V	$I_R = 100\mu A$
Forward Voltage	V_F	-	-	0.9 1 1.1 1.25	V	$I_F = 1mA$ $I_F = 10mA$ $I_F = 50mA$ $I_F = 150mA$
Reverse Leakage Current	I_R	-	-	5 80	nA nA	$V_R = 75V$ $V_R = 75V, T_J = 150^\circ C$
Total Capacitance	C_T	-	3	-	pF	$V_R = 0V, f = 1MHz$
Reverse Recovery Time	t_{rr}	-	-	3	us	$I_F = I_R = 10mA,$ $I_{rr} = 0.1 * I_R, R_L = 100\Omega$

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



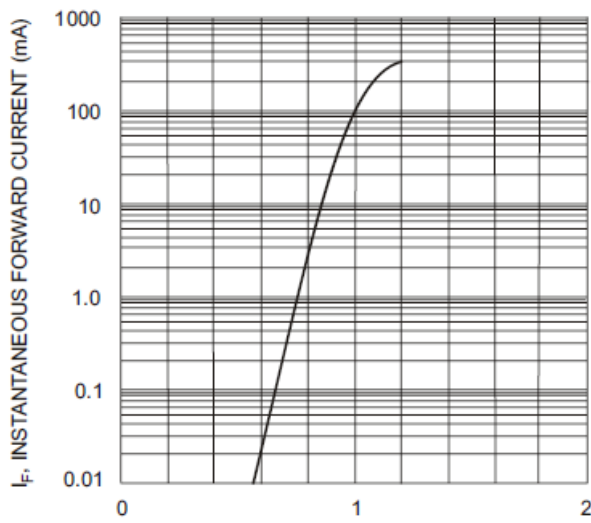
T_A, AMBIENT TEMPERATURE (°C)
Fig. 1 Power Derating Curve



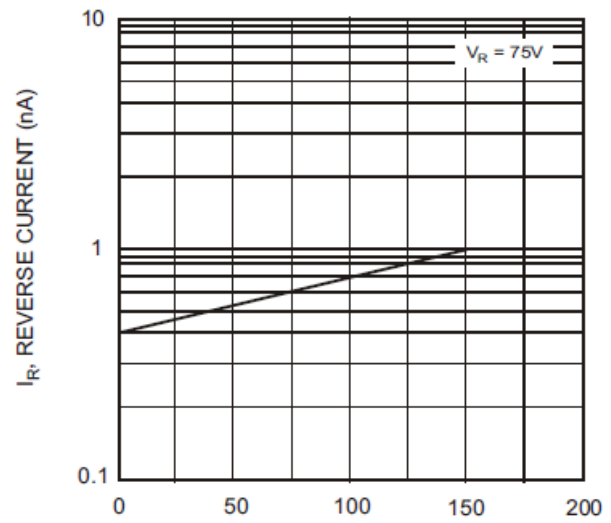
T_A, AMBIENT TEMPERATURE (°C)
Fig. 2 Current Derating Curve

Surface mount switching diode

BAW156



V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 3 Typical Forward Characteristics



T_A , AMBIENT TEMPERATURE (°C)
Fig. 4 Typical Reverse Characteristics

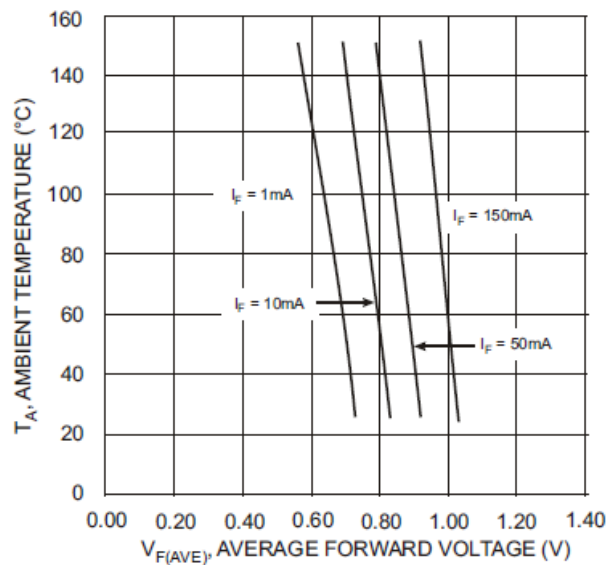


Fig. 5 Typical Forward Voltage vs Ambient Temperature

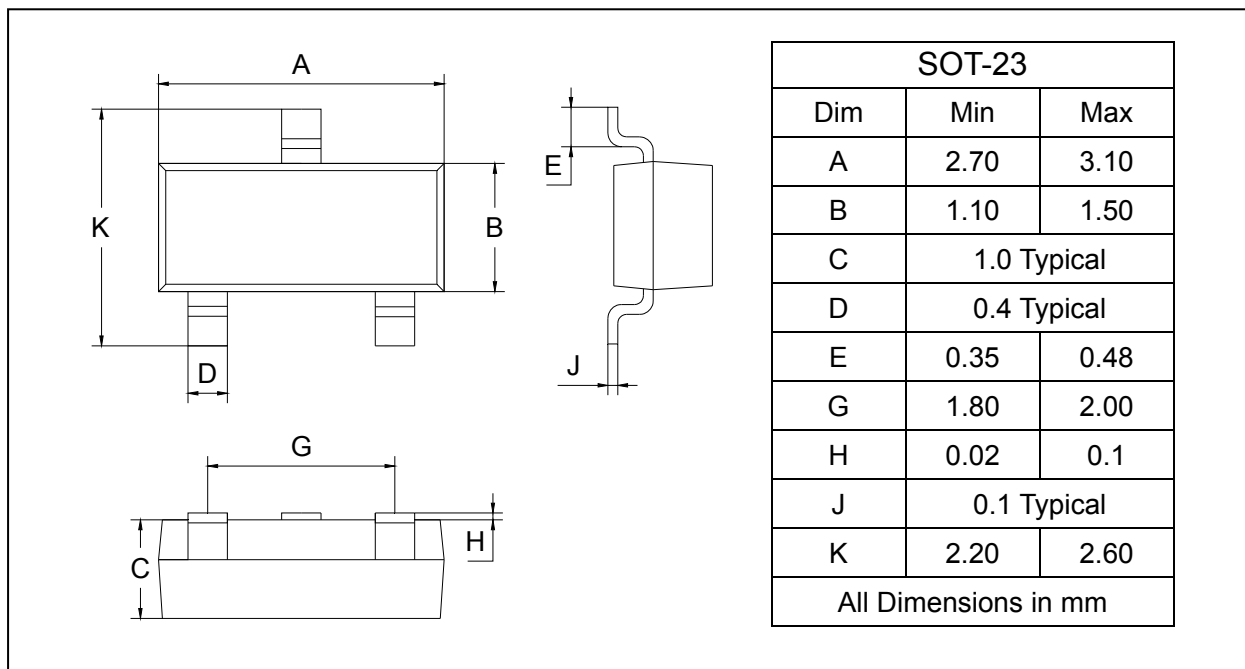
Surface mount switching diode

BAW156

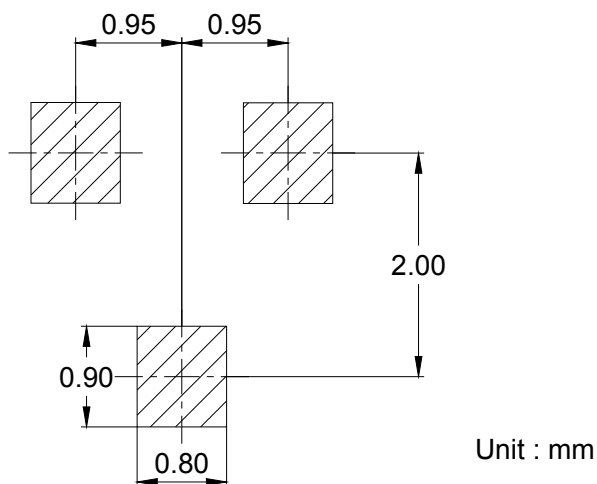
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
BAW156	SOT-23	3000/Tape&Reel