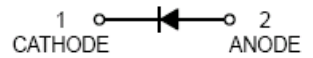
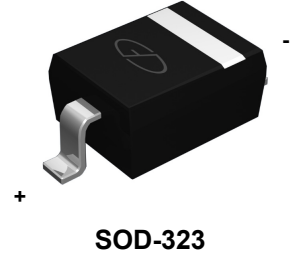


Features

- Small plastic SMD package
- High switching speed: max.4ns
- Continuous reverse voltage: max.100V
- Repetitive peak reverse voltage: max.100V
- Repetitive peak forward current: max.500mA



Schematic Diagram

Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Characteristic	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Continuous Reverse Voltage	V_R	100	V
Continuous Forward Current	I_F	250	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-Repetitive Peak Forward Current	I_{FSM}	$t=1\mu\text{s}$	4
		$t=1\text{ms}$	1
		$t=1\text{s}$	0.5
Power Dissipation	P_D	400	mW
Junction and Storage Temperature Range	T_J, T_{STG}	-65 to +150	$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	100	-	V	$I_R=100\mu\text{A}$
Forward Voltage	V_F	-	0.715 0.855 1.0 1.25	V	$I_F=1.0\text{mA}$ $I_F=10\text{mA}$ $I_F=50\text{mA}$ $I_F=150\text{mA}$
Reverse Current	I_R	-	1.0 0.03	μA	$V_R=75\text{V}$ $V_R=25\text{V}$
Capacitance Between Terminals	C_T	-	1.5	pF	$V_R=0, f=1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	-	4.0	ns	$I_F=I_R=10\text{mA}, R_L=100\Omega$

Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)

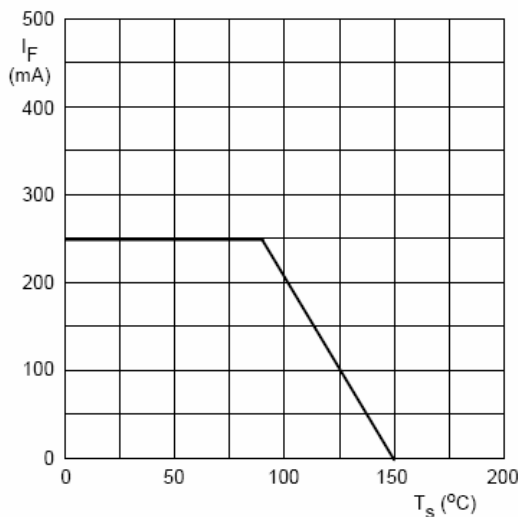
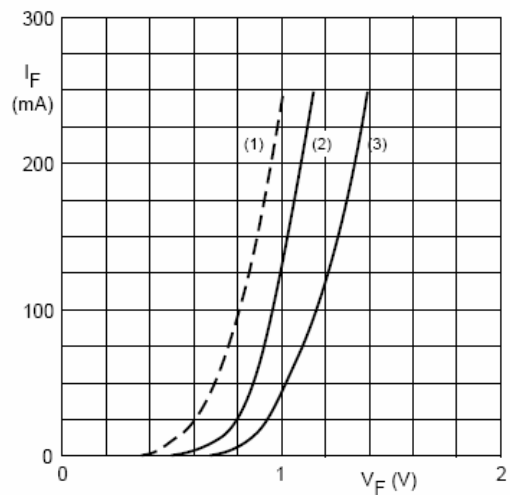


Fig.1 Maximum permissible continuous forward current as a function of soldering point temperature.



- (1) $T_j = 150^\circ\text{C}$; typical values.
- (2) $T_j = 25^\circ\text{C}$; typical values.
- (3) $T_j = 25^\circ\text{C}$; maximum values.

Fig.2 Forward current as a function of forward voltage.

Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)

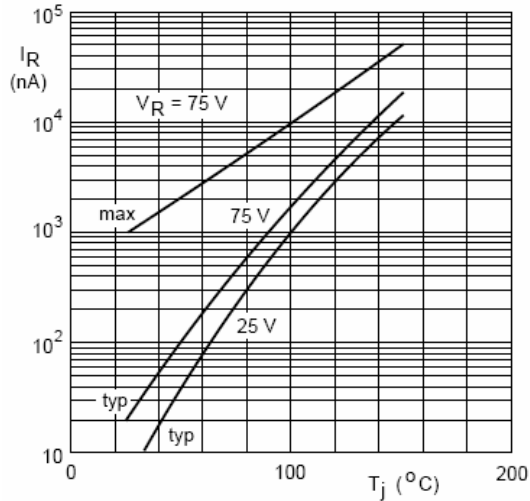
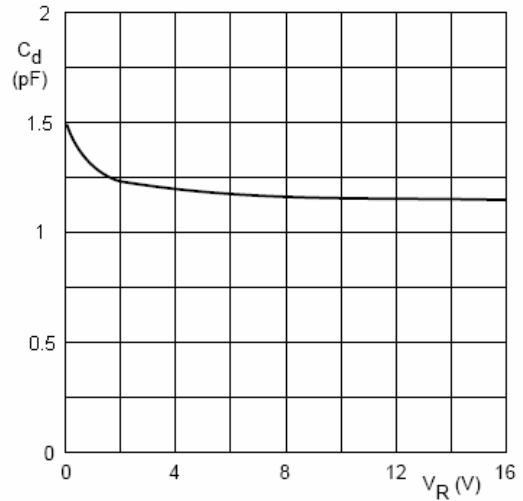


Fig.3 Reverse current as a function of junction temperature.



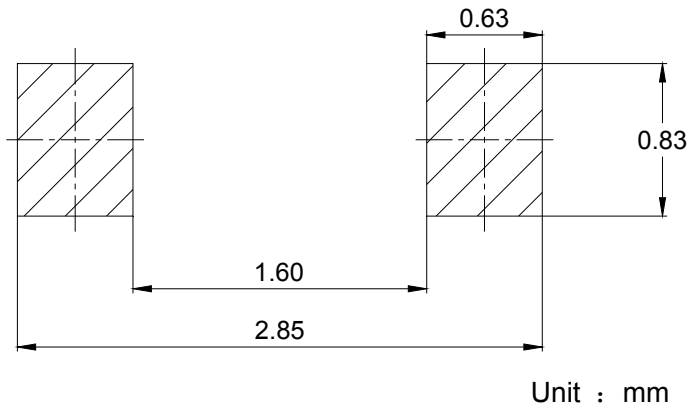
$f = 1 \text{ MHz}; T_j = 25^\circ\text{C}$.

Fig.4 Diode capacitance as a function of reverse voltage; typical values.

Package Outline Dimensions

SOD-323		
Dim	Min	Max
A	1.60	1.80
B	1.20	1.40
C	0.9 Max	
D	0.30 Typical	
E	0.22	0.42
H	0.02	0.1
J	0.1 Typical	
K	2.55	2.75
All Dimensions in mm		

Soldering Footprint



Ordering Information

Device	Package	Marking	Quantity	HSF Status
BAS316	SOD-323	A6	3000pcs / Reel	RoHS Compliant