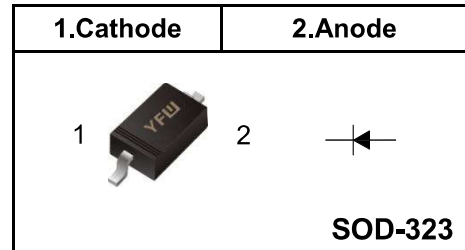


Low Leakage Switching Diode
Features

- ◆Fast Switching Device (TRR <3.0uS)
- ◆Power Dissipation of 200mW
- ◆High Stability and High Reliability
- ◆Low reverse leakage

Mechanical Data

- ◆SOD-323 Small Outline Plastic Package
- ◆Polarity: Color band denotes cathode end
- ◆Mounting Position: Any

Pinning

Marking Code

BAS116WS	PA
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Maximum Ratings & Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Value	Unit
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Power Dissipation	P_d	200	mW
Operating junction temperature	T_j	-55-+150	°C
Storage temperature range	T_s	-55-+150	°C
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	°C/W
Continuous Forward Current	I_F	200	mA
Non-repetitive Peak Forward Surge Current @ $t_p=1\mu s$; $T_A=25^\circ C$	I_{FSM}	2.0	A

Note: FR-5 Board=1.0*0.75*0.062 in.

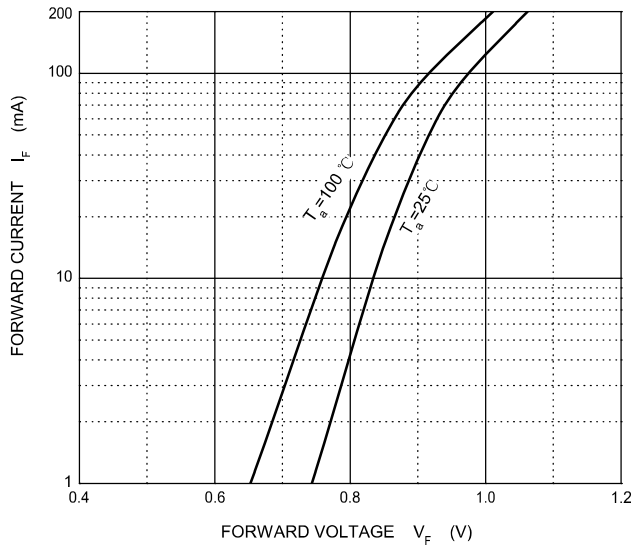
Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

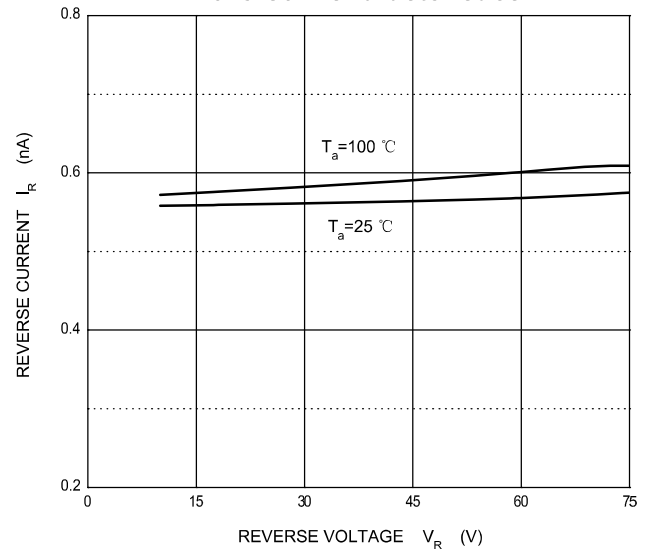
Parameter	Symbols	Test Condition	Limits			Unit
			Min	Typ	Max	
Reverse Voltage	$V_{(BR)}$	$I_R=100\mu A$	75			V
Reverse Leakage Current	I_R	$V_R=75V$	---		5	nA
		$V_R=75V T_j=150^\circ C$	---		80	nA
Forward Voltage	V_F	$I_F=1.0mA$	---		0.90	V
		$I_F=10mA$	---		1.00	
		$I_F=50mA$	---		1.10	
		$I_F=150mA$	---		1.25	
Reverse Recovery Time	T_{RR}	$I_F= I_R=10mA$ $R_L=100\Omega$	---		3.0	uS
Capacitance	C_T	$V_R=0V, f=1MHZ$	---		2.0	pF

Typical Characteristics

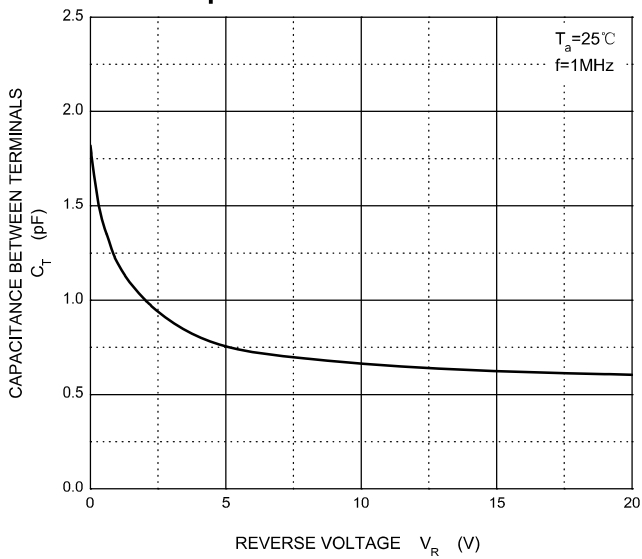
Forward Characteristics



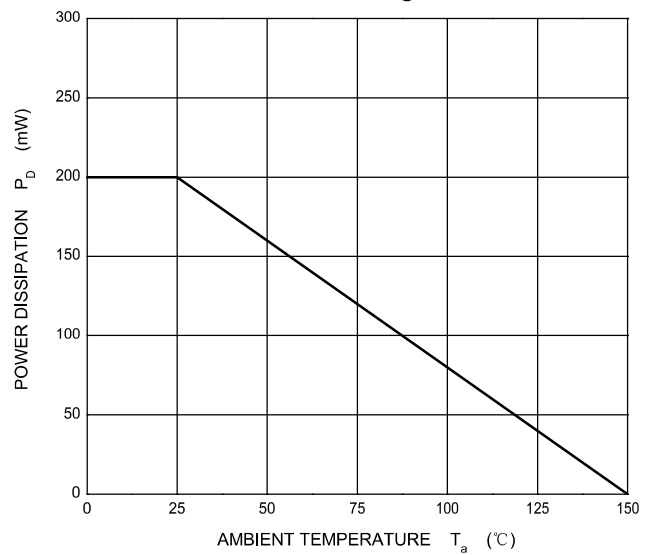
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve



Ordering information

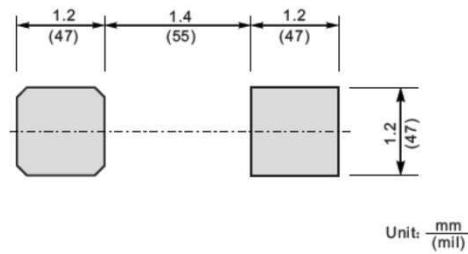
Package	Packing Description	Packing Quantity
SOD-323	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

Package Dimensions

SOD-323

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.8	1.1	32	43
C	0.08	0.15	3.1	5.9
D	1.2	1.4	47	55
E	1.4	1.8	63	70
E1	2.55	2.75	100	108
b	0.25	0.4	9.8	16
L1	0.2	0.45	7.9	16
A1	-	0.2	-	8
∠	9°			

The recommended mounting pad size



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