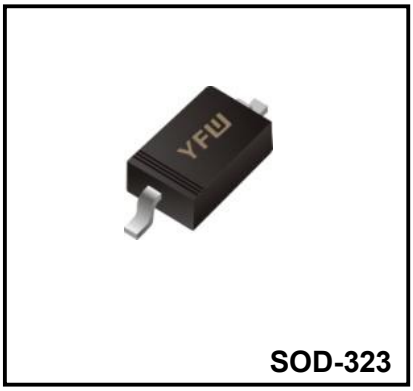
Low Leakage Switching Diode

Features

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



SOD-323

Mechanical Data

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

MARKING: PA

Maximum Ratings & Thermal Characteristics

(Ratings at 25℃ ambient temperature unless otherwise specified.)

Parameters	Symbol	Value	Unit
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Power Dissipation	Pd	200	mW
Operating junction temperature	Tj	-55-+150	℃
Storage temperature range	Ts	-55-+150	℃
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	℃/W
Continuous Forward Current	I_F	200	mA
Non-repetitive Peak Forward Surge Current @tp=1us; TA=25℃	I_{FSM}	2.0	A

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

Electrical Characteristics

(Ratings at 25℃ ambient temperature unless otherwise specified).

Parameter	Symbols	Test Condition	Limits			Unit
			Min	Typ	Max	
Reverse Voltage	$V_{(BR)}$	IR=100uA	75			V
Reverse Leakage Current	I_R	VR=75V	---		5	nA
		VR=75 Tj=150℃	---		80	nA
Forward Voltage	V_F	IF=1.0mA	---		0.90	V
		IF=10mA	---		1.00	
		IF=50mA	---		1.10	
		IF=150mA	---		1.25	
Reverse Recovery Time	T_{RR}	IF= IR=10mA RL=100Ω	---		3.0	uS
Capacitance	CT	VR=0V, f=1MHZ	---		2.0	pF

Typical Characteristics

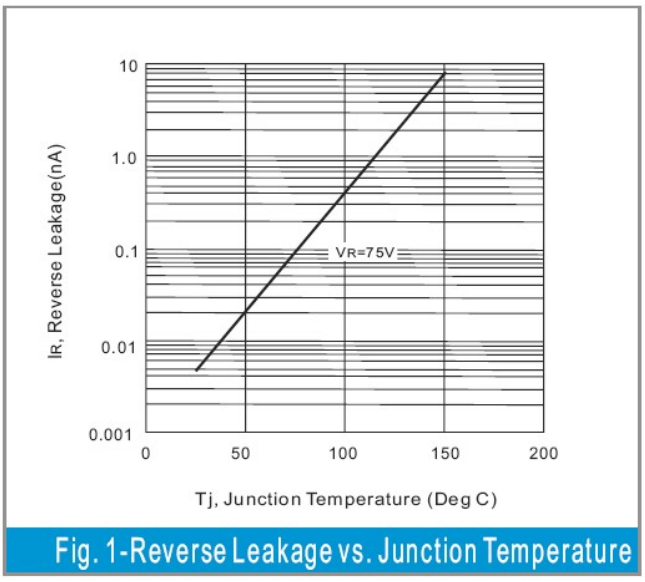


Fig. 1-Reverse Leakage vs. Junction Temperature

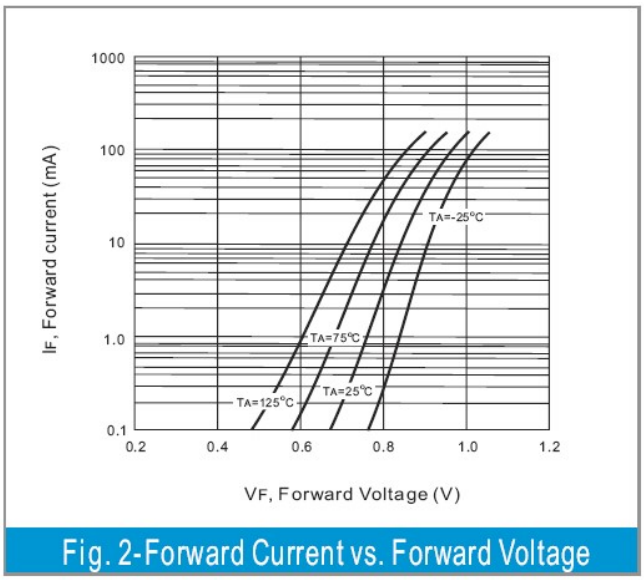


Fig. 2-Forward Current vs. Forward Voltage

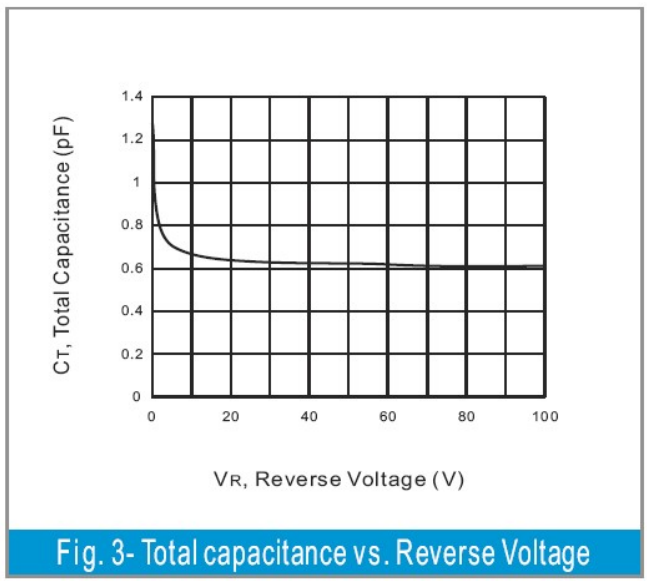
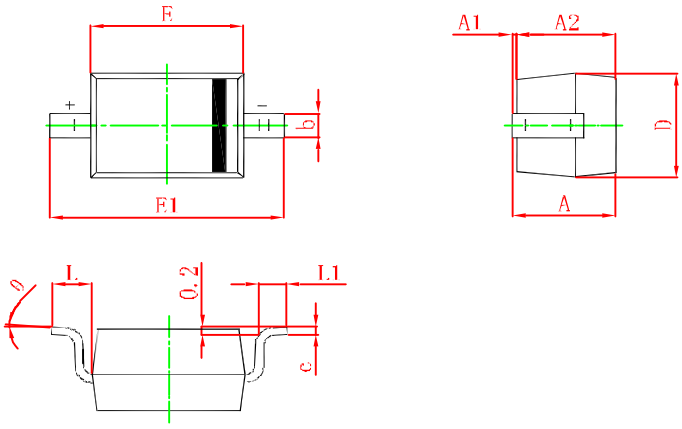


Fig. 3- Total capacitance vs. Reverse Voltage

Package Outline SOD-323

Plastic surface mounted package



Symbol	Min.(mm)	Max.(mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	**0°**	**8°**

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOD-323	Tape/Reel,7”reel	3000	EIA-481-1