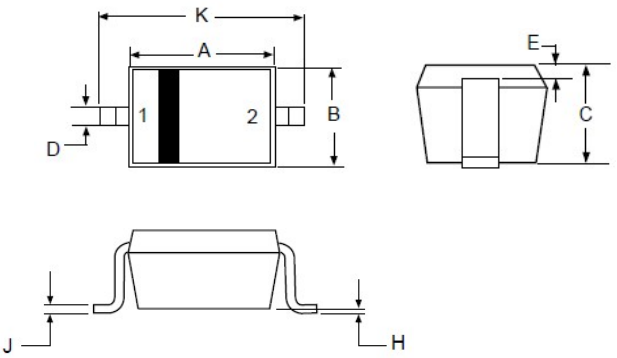
High Speed Switching Diode
Reverse Voltage 90 Volts Forward Current 0.1 Ampere

Features
- High switching speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- High reliability with high surge current handling capability
- RoHS compliant

Typical Applications
- High-speed switching.

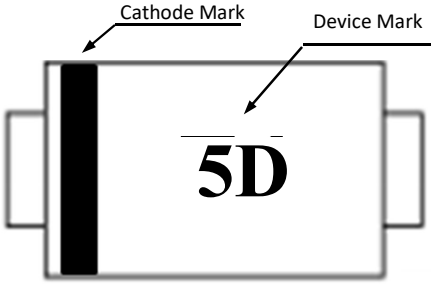
Mechanical Data
- Case: SOD-323, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Indicated by Cathode Band

SOD-323



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.60	1.80	0.063	0.071
B	1.15	1.35	0.045	0.053
C	0.80	1.00	0.031	0.039
D	0.25	0.40	0.010	0.016
E	0.15 REF		0.006 REF	
H	0.00	0.10	0.000	0.004
J	0.089	0.177	0.0035	0.0070
K	2.30	2.70	0.091	0.106

Marking



Absolute Maximum Ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Rated Value	Unit
Peak Reverse Voltage	V_{RM}	90	V
DC Reverse Voltage	V_R	80	V
Peak Forward Current	I_{FM}	225	mA
Mean Rectifying Current	I_O	100	mA
Surge Current (1s)	I_{surge}	500	mA
Operation Junction Temperature Range	T_J	-55 to +125	°C
Storage Temperature Range	T_{STG}	-55 to +125	°C

Electrical Characteristics (Ta=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min	Max	Unit
Forward Voltage		I_F = 100mA	-	1.2	V
Reverse Current		V_R=80V	-	0.1	uA
Capacitance Between Terminals	C_T	V_R=0.5V, f=1MHz	-	3.0	pF
Reverse Recovery Time	trr	I_F=10mA, V_R=6V, I_{RR}=1mA, RL=100Ω	-	4.0	ns

Ratings and Characteristics Curves (Ta=25°C unless otherwise noted)

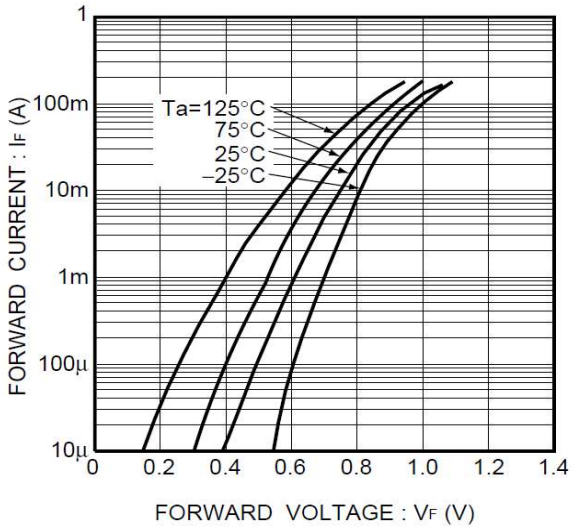


Fig.1 Forward characteristics

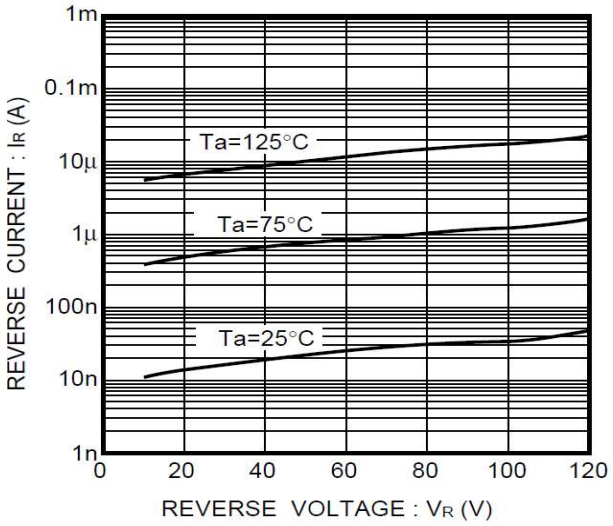


Fig.2 Reverse characteristics

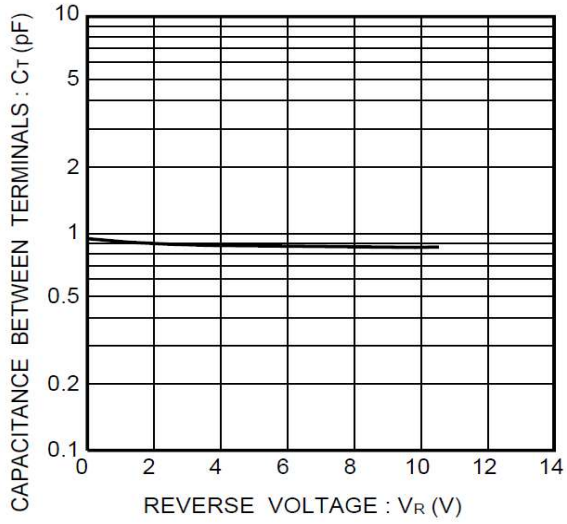


Fig.3 Capacitance between terminals characteristics

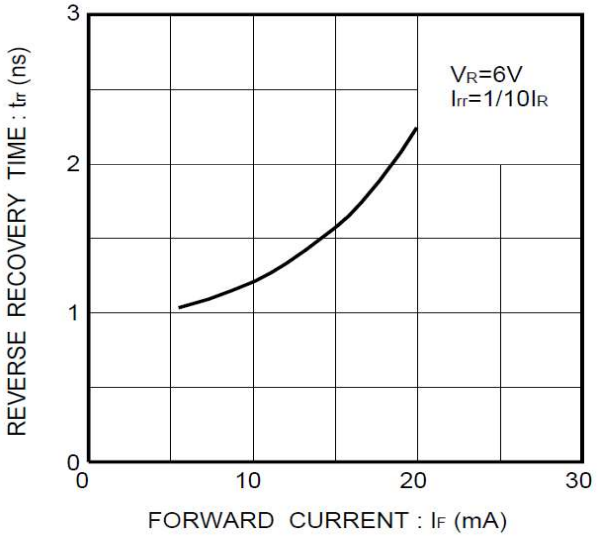


Fig.4 Reverse recovery time characteristics

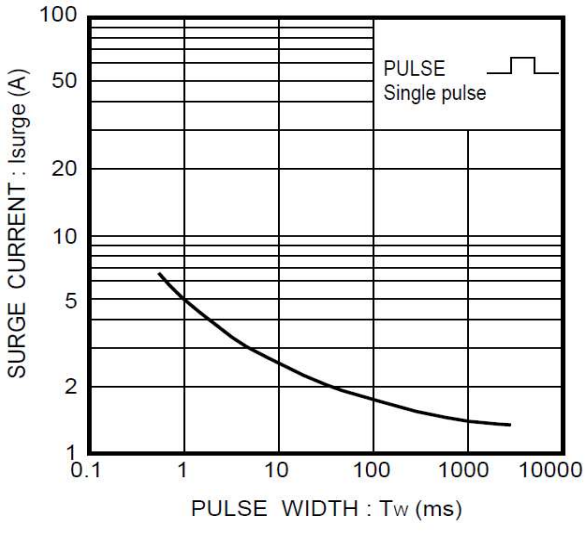


Fig.5 Surge current characteristics

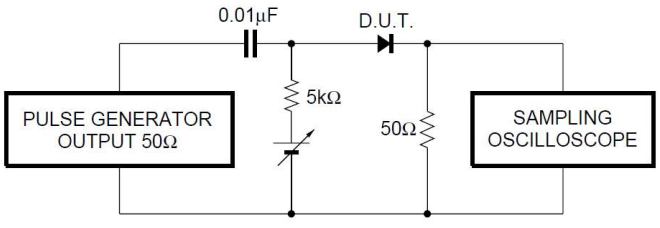


Fig.6 Reverse recovery time (t_{rr}) measurement circuit