



FAST SWITCHING DIODES

Features

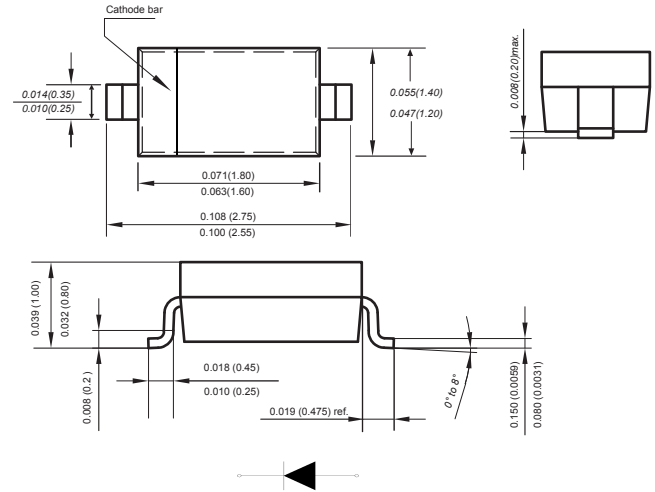
- ◆ Small surface mounting type.(UMD2)
- ◆ High speed.($t_n=1.2ns$ typ.)
- ◆ High reliability with high surge current
- ◆ handling capability.

SOD_323



Mechanical Data

Case: JEDEC SOD-323 molded plastic body
 Terminals: Plated leads solderable per MIL-STD-750, Method 2026
 Polarity: Polarity symbols marked on case
 Weight : 0.0007 ounce, 0.02 grams
 Marking: A



Dimensions in inches and (millimeters)

Absolute Maximum Ratings at 25 °C

PARAMETER	SYMBOLS	1SS355	UNITS
DC blocking voltage	V_R	80	V
Peak forward current	I_{FM}	225	mA
Average rectified output current	I_o	100	mA
Surge current (1s)	I_{Surge}	500	mA
Junction temperature	T_j	125	°C
Storage temperature	T_{STG}	-55 to +125	°C
Non-repetitive peak reverse voltage	V_{RM}	90	V

Characteristics at $T_a=25\text{ °C}$

PARAMETER	SYMBOLS	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F			1.2	V	$I_F=100mA$
Reverse current	I_R			0.1	μA	$V_R=80V$
Capacitance between terminals	C_T			3	pF	$V_R=0.5, f=1.0MHz$
Reverse recovery time	t_{rr}			4	ns	$I_F=10mA, V_R=6V, R_L=100\Omega$



Typical Characteristics

FIG. 1- FORWARD CHARACTERISTICS

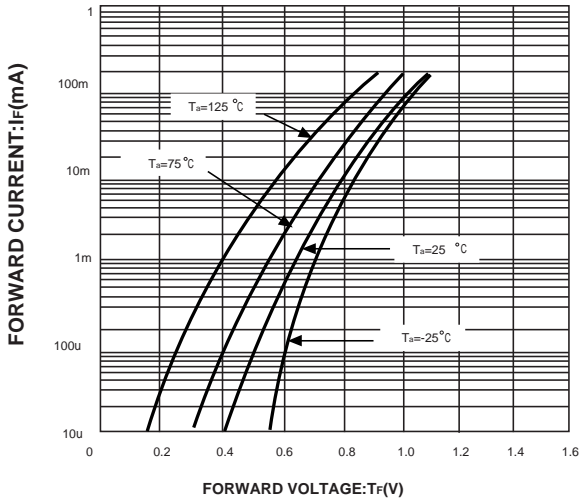


FIG. 2- REVERSE CHARACTERISTICS

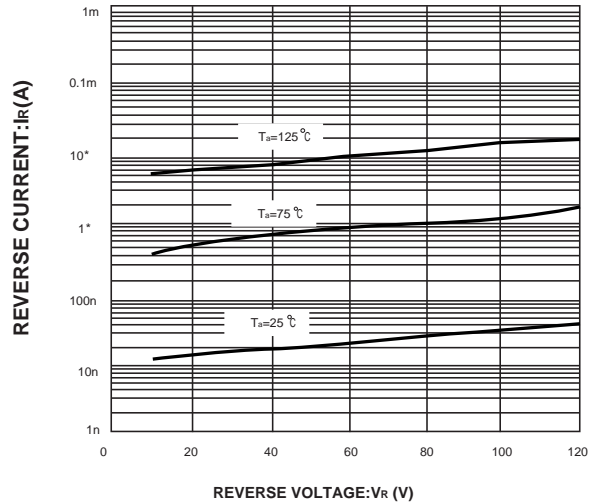


FIG. 3- CAPACITANCE BETWEEN TERMINALS CHARACTERISTICS

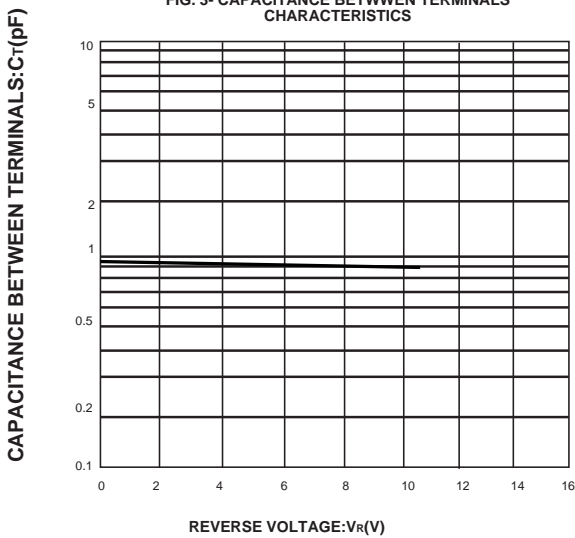


FIG. 4- REVERSE RECOVERY TIME CHARACTERISTICS

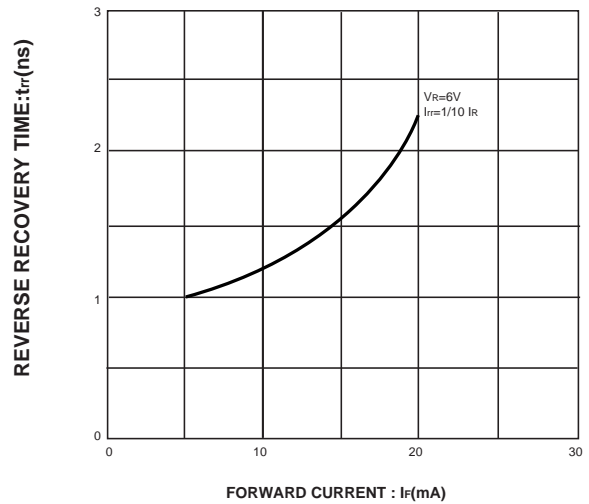
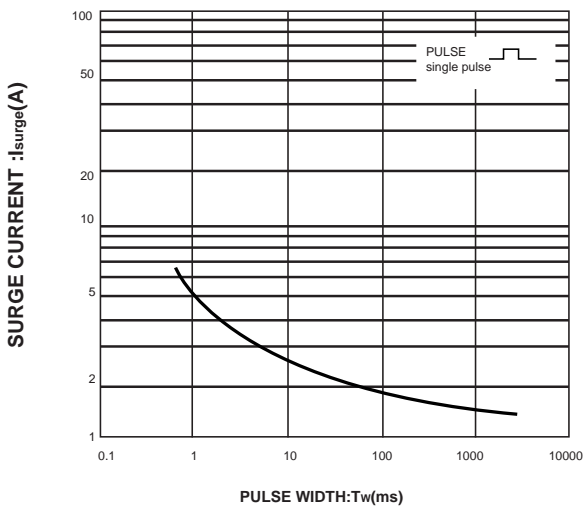
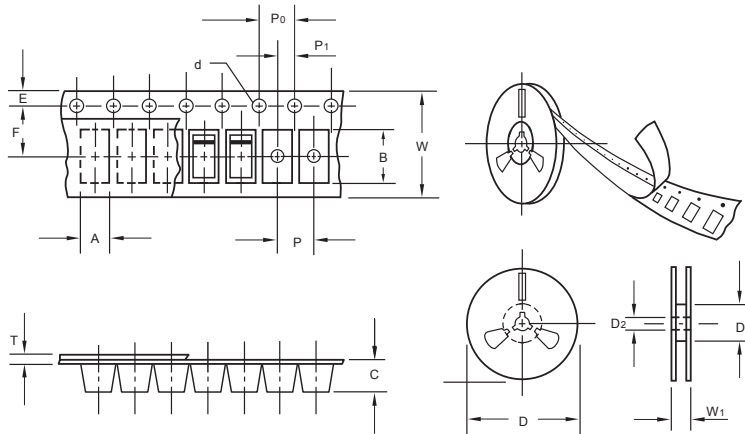


FIG. 5- SURGE CURRENT CHARACTERISTICS



The curve above is for reference only.

Packing information



unit:mm

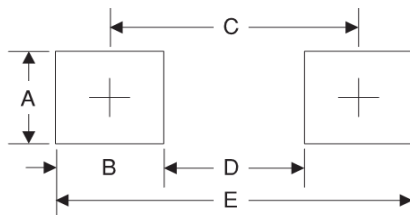
Item	Symbol	Tolerance	SOD-323
Carrier width	A	0.1	2.1
Carrier length	B	0.1	4.0
Carrier depth	C	0.1	1.60
Sprocket hole	d	0.05	1.55
7" Reel outside diameter	D	2.0	178.00
7" Reel inner diameter	D1	min	50.0
Feed hole diameter	D2	0.5	13.00
Sprocket hole position	E	0.1	1.75
Punch hole position	F	0.1	3.50
Punch hole pitch	P	0.1	4.00
Sprocket hole pitch	P0	0.1	4.00
Embossment center	P1	0.1	2.00
Overall tape thickness	T	0.1	0.25
Tape width	W	0.3	8.15
Reel width	W1	1.0	10.5

Note: Devices are packed in accordance with EIA standard RS-481-A and specifications listed above.

Reel packing

PACKAGE	REEL SIZE	REEL (pcs)	COMPONENT SPACING (m/m)	BOX (pcs)	INNER BOX (m/m)	REEL DIA, (m/m)	CARTON SIZE (m/m)	CARTON (pcs)	APPROX. GROSS WEIGHT (kg)
SOD-323	7"	3,000	4.0	45,000	210*208*203	178	430*430*235	180,000	

Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	0.7	0.028
B	0.7	0.028
C	2.15	0.085
D	1.8	0.071
E	2.85	0.112