

FAST SWITCHING DIODES

Features

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

SOD-323


Mechanical Data

Case : JEDEC SOD-323 molded plastic body

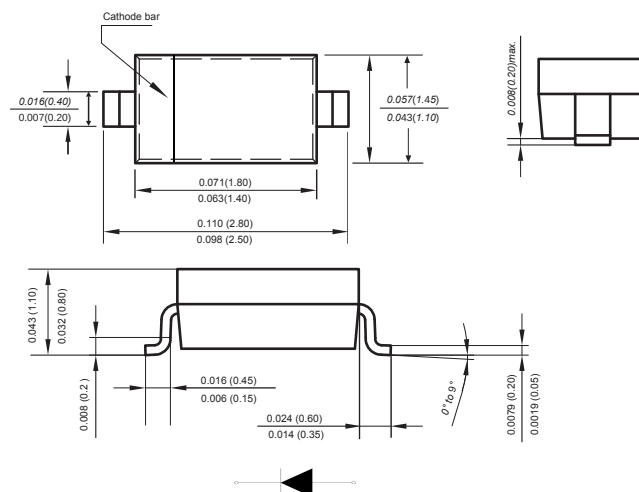
Terminals : Plated leads solderable per MIL-STD-750, Method 2026

Polarity : Polarity symbols marked on case

Weight : 0.0007 ounce, 0.02 grams

Marking: A

Absolute Maximum Ratings at 25 °C



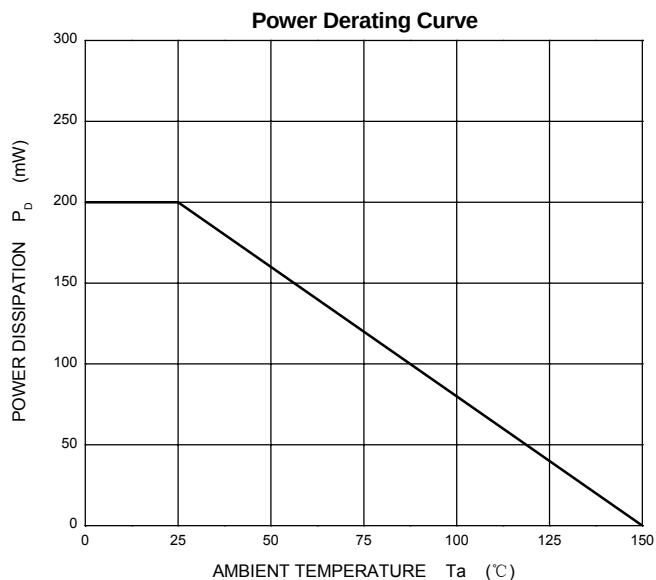
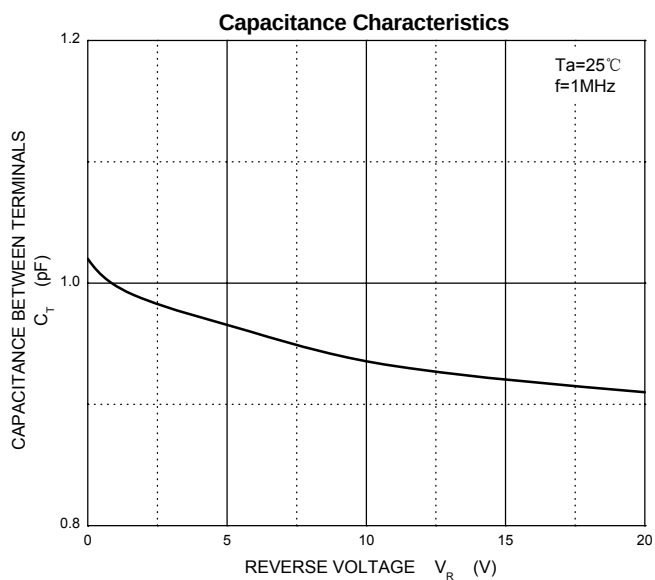
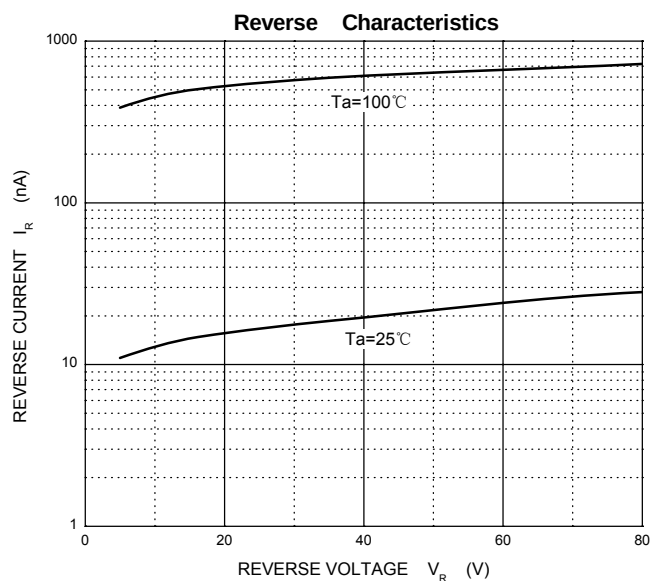
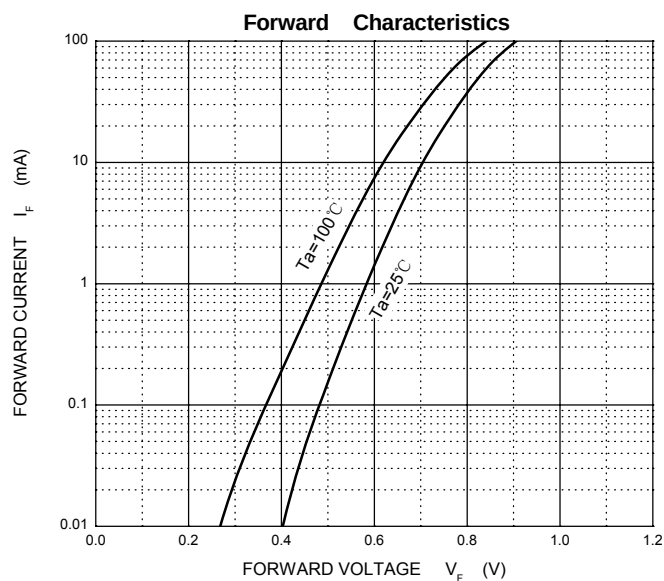
Dimensions in inches and (millimeters)

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 $T_a=25\text{ °C}$

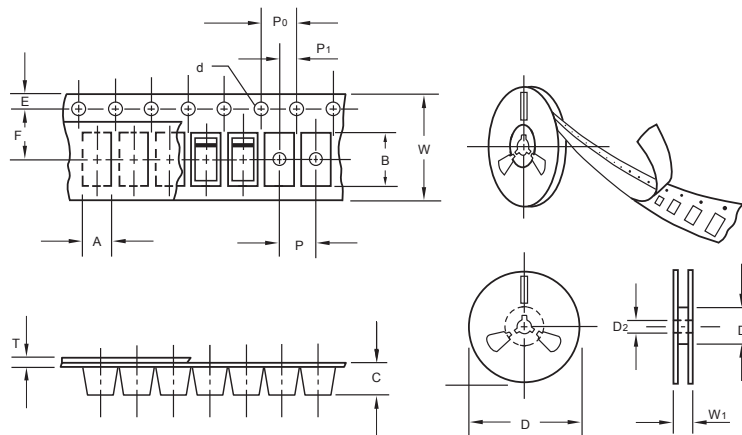
PARAMETER	SYMBOLS	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F			1.2	V	$I_F=100\text{mA}$
Reverse current	I_R			0.1	uA	$V_R=80\text{V}$
Capacitance between terminals	C_T			3	pF	$V_R=0.5, f=1.0\text{MHz}$
Reverse recovery time	t_{rr}			4	ns	$I_F=10\text{mA}, V_R=6\text{V}, R_L=100\Omega$

Typical Characteristics



The curve above is for reference only.

Packing information



unit:mm

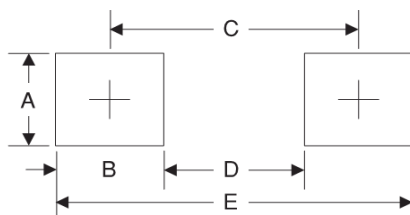
Item	Symbol	Tolerance	SOD-323
Carrier width	A	0.1	2.1
Carrier length	B	0.1	4.0
Carrier depth	C	0.1	1.60
Sprocket hole	d	0.05	1.55
7" Reel outside diameter	D	2.0	178.00
7" Reel inner diameter	D ₁	min	50.0
Feed hole diameter	D ₂	0.5	13.00
Sprocket hole position	E	0.1	1.75
Punch hole position	F	0.1	3.50
Punch hole pitch	P	0.1	4.00
Sprocket hole pitch	P ₀	0.1	4.00
Embossment center	P ₁	0.1	2.00
Overall tape thickness	T	0.1	0.25
Tape width	W	0.3	8.15
Reel width	W ₁	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	1.45	0.057
E	2.85	0.112