

FEATURES AND BENEFITS

Product Summary		
I_{FM}	300mA	@25 °C
V_F	0.715V	@20mA
V_{RRM}	100V	@25 °C

- For General Purpose Switching Applications
- High Conductance
- RoHS Compliant / Green EMC UL Flammability Classification Rating 94V-0
- Matte Tin (Sn) Lead finish Solderable per MIL-STD-202, Method 208
- Moisture Sensitivity: Level 1 per J-STD-020

SOD-523



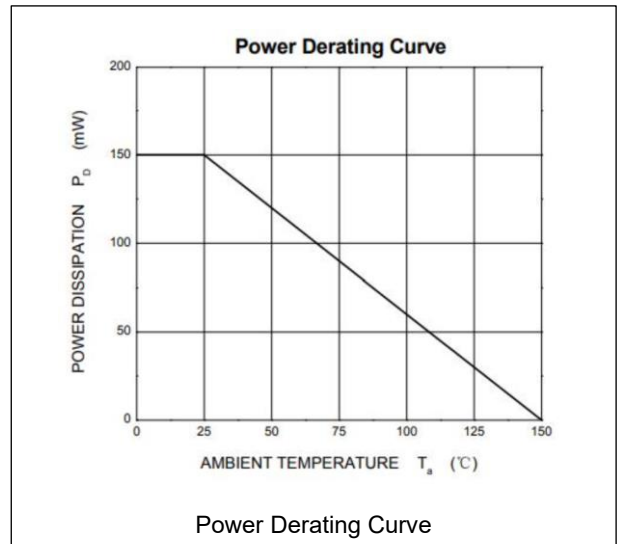
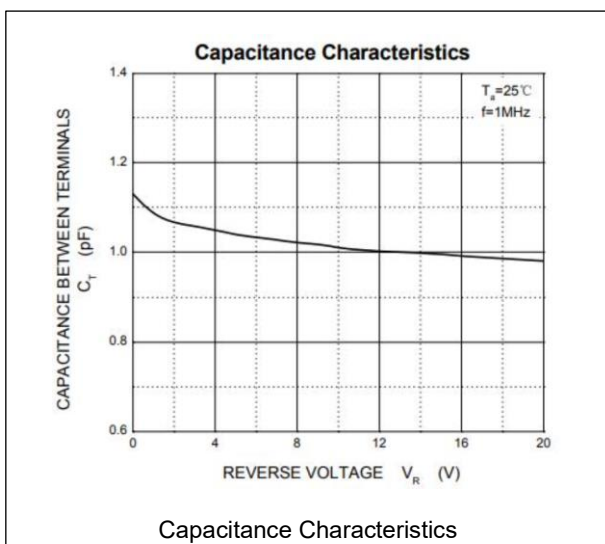
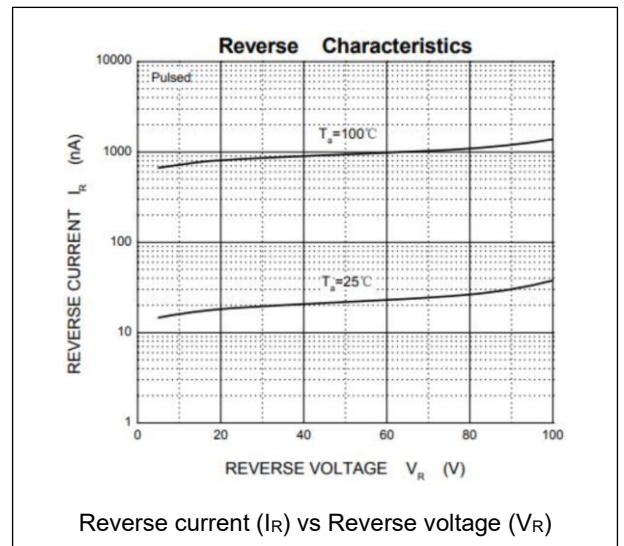
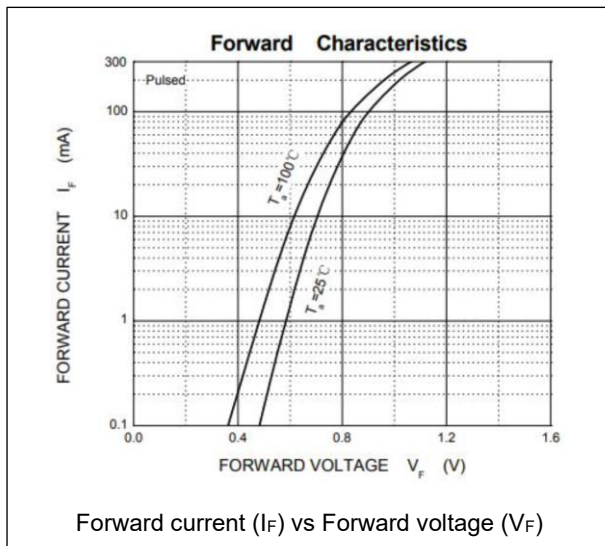
Cathode  Anode

Maximum Ratings (TA = 25 °C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Working Reverse Voltage	V_{RWM}	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	75	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	150	mA
Non-Repetitive Peak Forward Surge Current (@t=8.3ms)	I_{FSM}	2.0	A
Power Dissipation	P_{TM}	150	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)

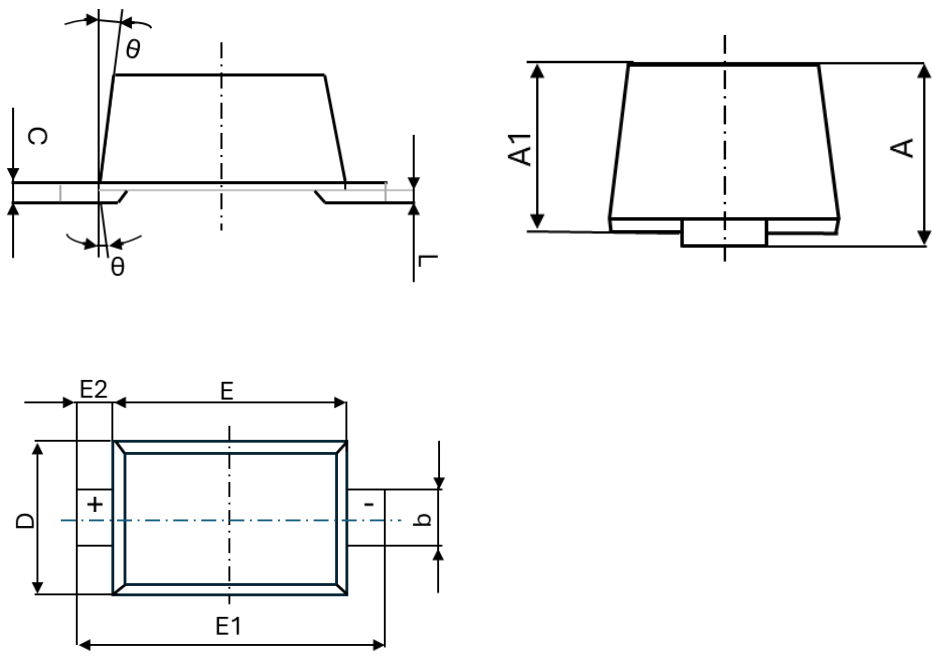
PARAMETER	SYMBOL	CONDITION	MIN	MAX	UNIT
Forward Voltage	V_F	$I_F = 1\text{mA}$		0.715	V
		$I_F = 10\text{mA}$		0.855	
		$I_F = 50\text{mA}$		1.00	
		$I_F = 150\text{mA}$		1.25	
Reverse Current	I_R	$V_R = 75\text{V}$ (25 °C)		1	uA
		$V_R = 20\text{V}$ (25 °C)		25	nA
		$V_R = 75\text{V}$ (150 °C)		50	uA
Capacitance	C_T	$V_R = 0\text{V}$, $f = 1\text{MHz}$		2.0	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 10\text{mA}$, $I_{RR} = 1\text{mA}$, $R_L = 100\Omega$		4	ns

RATING AND CHARACTERISTICS CURVES



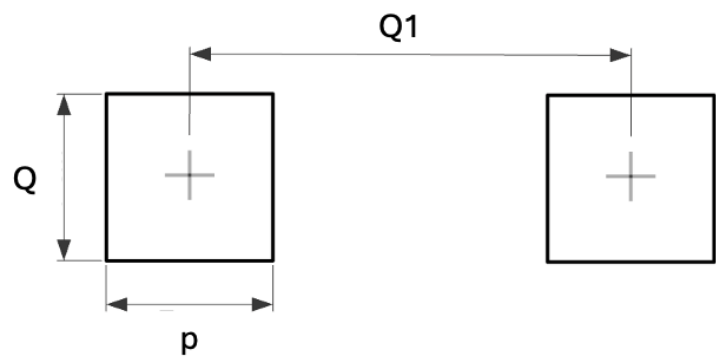
PACKAGE OUTLINE DIMENSIONS

SOD-523



Symbol	MIN	MAX
A	0.51	0.77
A1	0.50	0.70
b	0.25	0.35
c	0.08	0.15
D	0.75	0.85
E	1.10	1.30
E1	1.50	1.70
E2	0.20REF.	
L	0.01	0.07
θ	7°REF.	
Unit: mm		

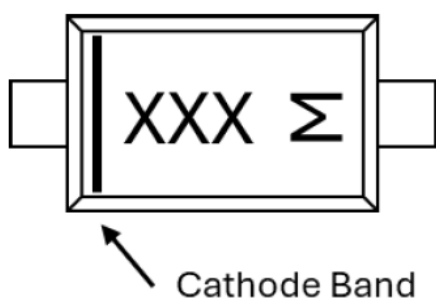
SUGGESTED PAD LAYOUT



Symbol	Type
Q1	1.42
Q	0.7
p	0.6
Unit: mm	

DEVICE MARKING CODE AND ORDERING INFORMATION

DEVICE	Marking	Quantity	Packing
1N4148WT	T4	8000/7"Reel	Tape & Reel



XXX: Product Marking Code

Σ : Date Code (Rotate 90° counterclockwise)

Odd Year	Even Year
1	E
2	F
3	H
4	J
5	K
6	L
7	N
8	P
9	U
T	X
V	Y
C	Z

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