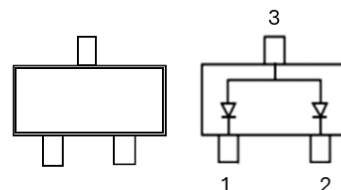


FEATURES AND BENEFITS

Product Summary		
I_{FM}	250mA	@25 °C
V_F	0.715V	@1mA
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
- Weight: 0.008 grams (Approximate)

SOT-23



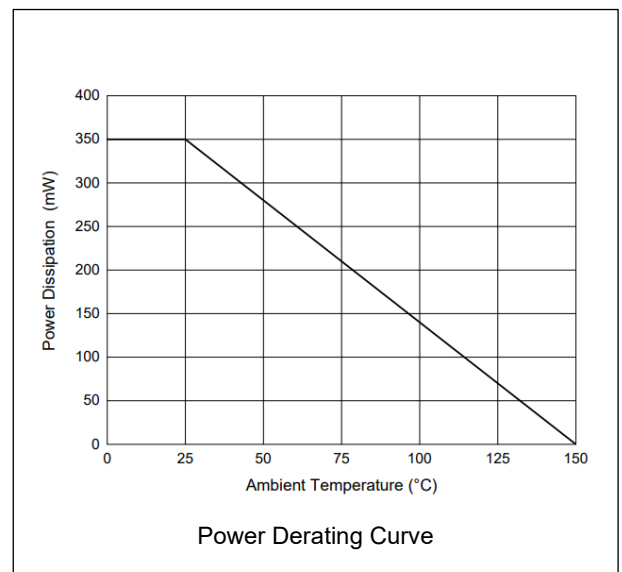
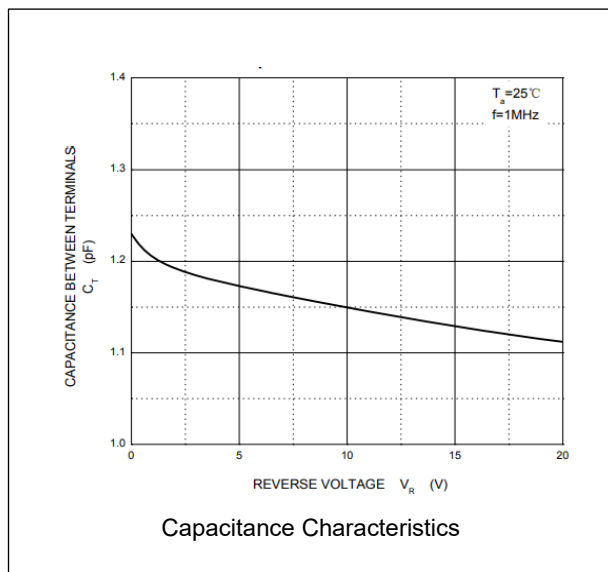
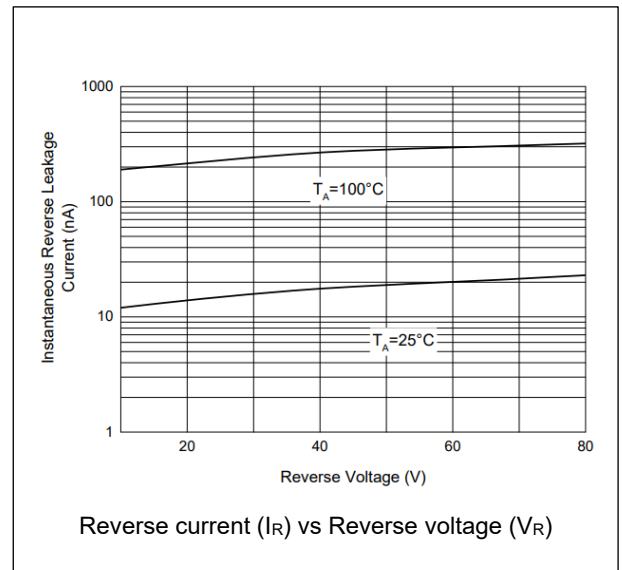
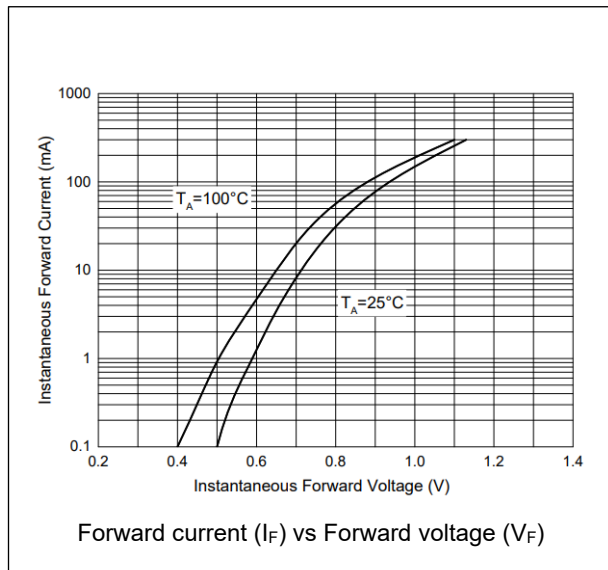
Maximum Ratings (TA = 25 °C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Working Reverse Voltage	V_{RWM}	75	V
Forward Continuous Current	I_{FM}	250	mA
Non-Repetitive Peak Forward Surge Current (@t=8.3mS)	I_{FSM}	2.0	A
Power Dissipation	P_{TM}	350	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 to 150	°C

THERMAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Thermal Resistance from Junction to Ambient*	$R_{\theta JA}$	357	°C/W

* Device mounted on 1"x1" FR4 PCB

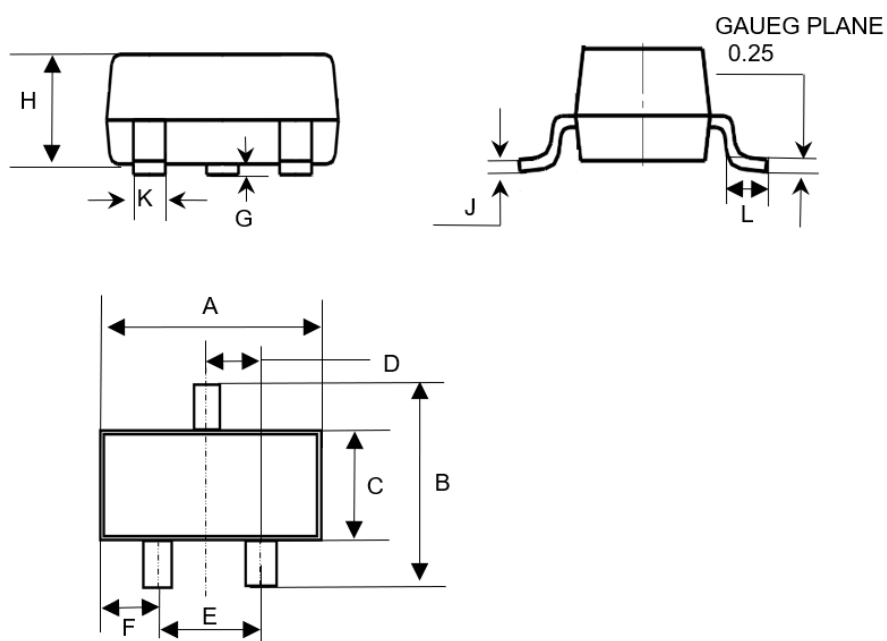
ELECTRICAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)					
PARAMETER	SYMBOL	CONDITION	MIN	MAX	UNIT
Forward Voltage	V_F	$I_F = 1mA$		0.715	V
		$I_F = 10mA$		0.855	
		$I_F = 50mA$		1.00	
		$I_F = 150mA$		1.25	
Reverse Current	I_R	$V_R = 20V$		25	nA
		$V_R = 75V$		1.00	uA
Capacitance	C_T	$V_R = 0V, f = 1MHz$		2.00	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 10mA, I_{rr} = 0.1mA, R_L = 100\Omega$		4.00	nS

RATING AND CHARACTERISTICS CURVES



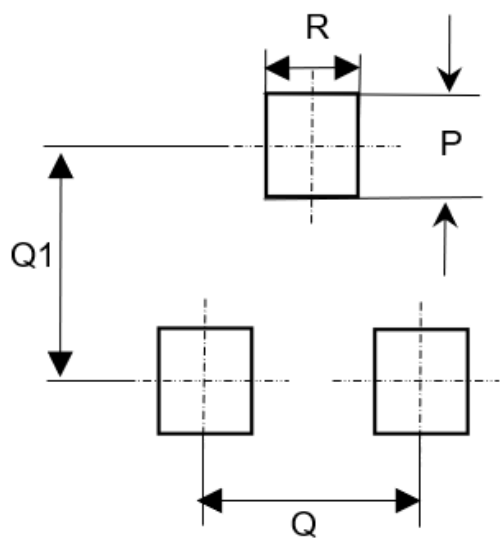
PACKAGE OUTLINE DIMENSIONS

SOT-23



Symbol	MIN	MAX
A	2.800	3.040
B	2.100	2.640
C	1.200	1.400
D	0.890	1.030
E	1.780	2.050
F	0.450	0.600
G	0.013	0.100
H	0.900	1.110
J	0.085	0.180
K	0.370	0.510
L	0.300	0.500
Unit: mm		

SUGGESTED PAD LAYOUT



Land Pattern Recommendation

Symbol	Type
Q	1.900
Q1	2.000
P	0.900
R	0.800
Unit: mm	

DEVICE MARKING AND ORDERING INFORMATION

DEVICE	Marking	Quantity	Packing
MMBD4148CA	D6	3000/Reel	Tape & Reel

NOTICE:

AZUREMOTO'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS COMPONENTS IN ANY LIFE SUPPORT DEVICES OR SYSTEMS.

AZUREMOTO RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY OR RUGGEDNESS.