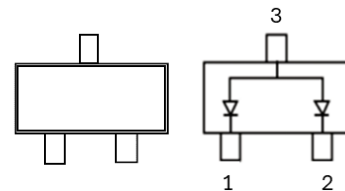


FEATURES AND BENEFITS

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)

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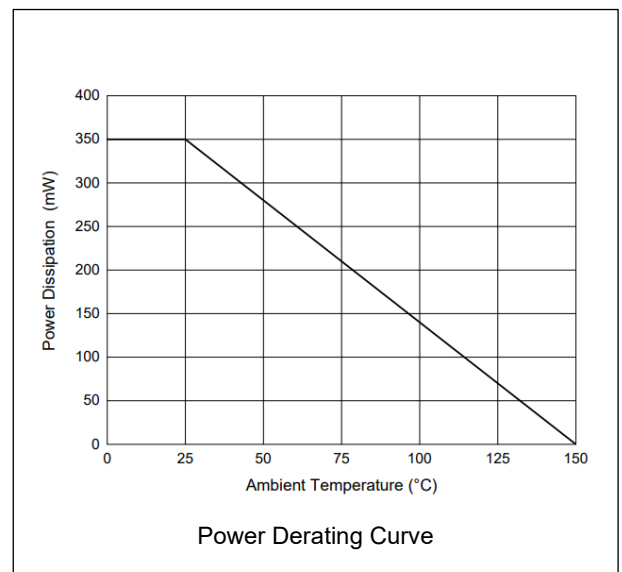
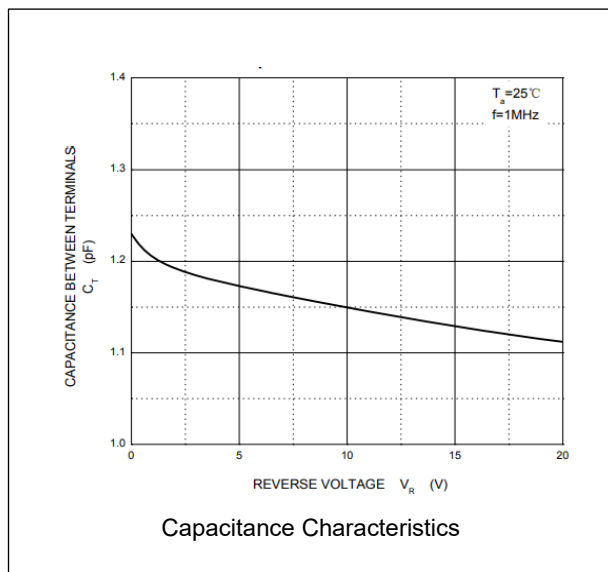
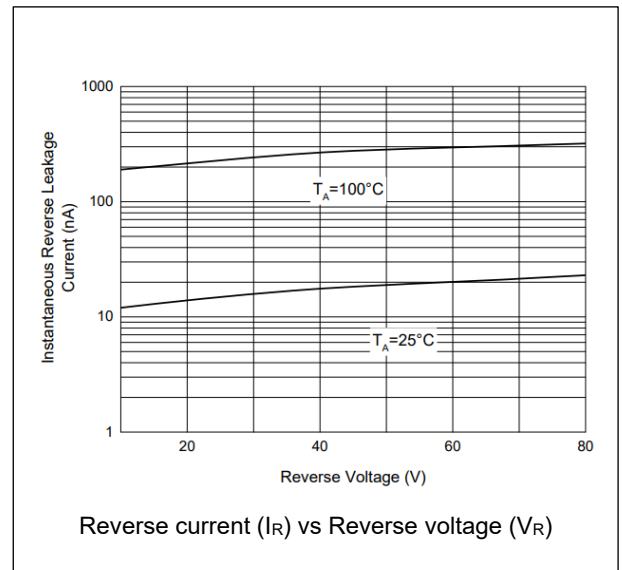
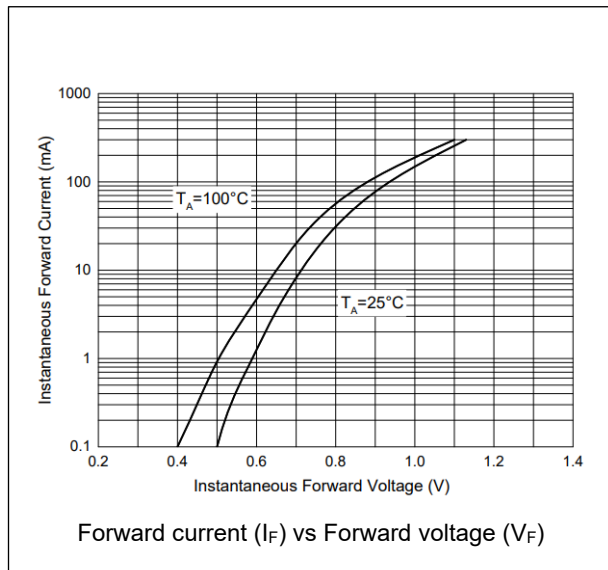
Maximum Ratings (TA = 25 °C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Working Reverse Voltage	V_{RWM}	75	V
Forward Continuous Current	I_{FM}	250	mA
Non-Repetitive Peak Forward Surge Current (@t=8.3mS)	I_{FSM}	2.0	A
Power Dissipation	P_{TM}	350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

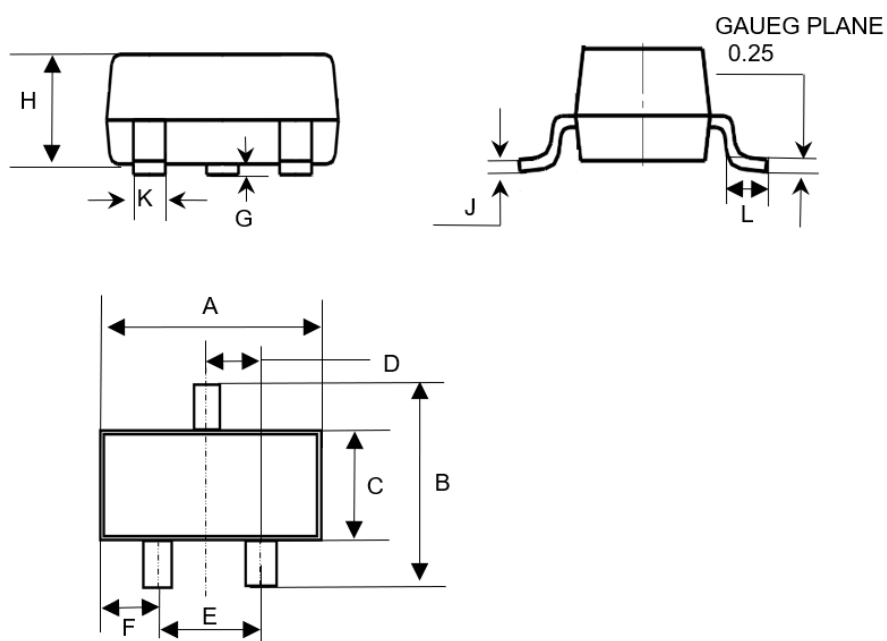
ELECTRICAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)					
PARAMETER	SYMBOL	CONDITION	MIN	MAX	UNIT
Forward Voltage	V_F	$I_F = 1mA$		0.715	V
		$I_F = 10mA$		0.855	
		$I_F = 50mA$		1.00	
		$I_F = 150mA$		1.25	
Reverse Current	I_R	$V_R = 20V$		25	nA
		$V_R = 75V$		1.00	uA
Capacitance	C_T	$V_R = 0V, f = 1MHz$		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



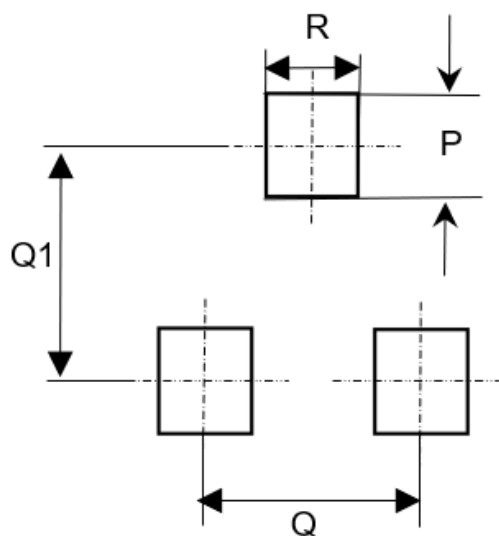
PACKAGE OUTLINE DIMENSIONS

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:

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