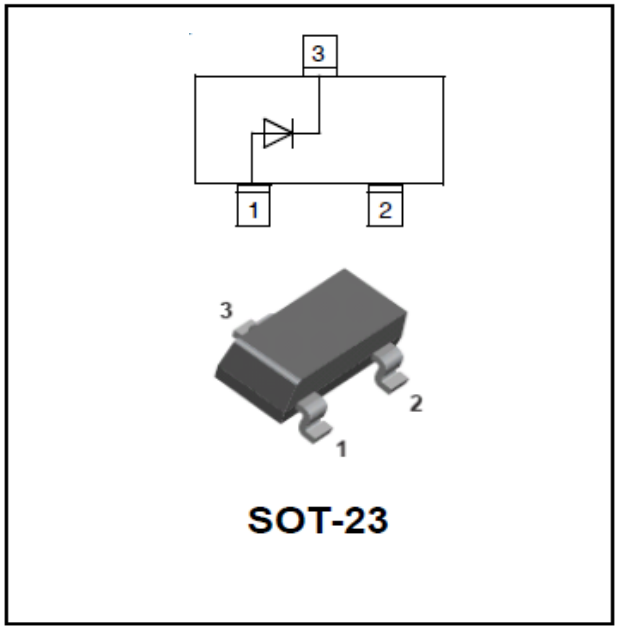
Switching Diode
MMBD4148

SOT-23



FEATURES

- Epoxy meets UL-94 V-0 flammability rating
- Moisure Sensitivity Level 1
- High Conductance
- Surface mount package ideally Suited for Automatic Insertion

MECHANICAL DATA

- **Package**: SOT-23
  Molding compound meets UL 94 V-0 flammability rating
  RoHS-compliant, halogen-free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking**: KA2

MAXIMUM RATINGS (Ta=25℃ Unless otherwise specified)

Item	Symbol	Unit	Value
Peak Repetitive Reverse Voltage	V_{RRM}	V	100
Reverse Voltage	V_R	V	100
Forward Continuous Current, Per Leg	I_F	mA	200
Non-Repetitive Peak Forward Surge Current @ t=8.3ms, half sine-wave	I_{FSM}	A	2
Power Dissipation	P_D	mW	350
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	℃/W	357
Operation Junction Temperature	T_J	℃	-55 to +150
Storage Temperature	T_{STG}	℃	-55 to +150

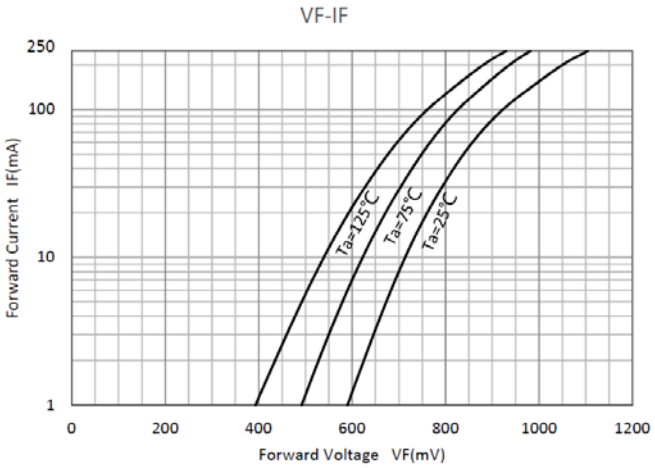
ELECTRICAL CHARACTERISTICS (Ta=25℃ Unless otherwise specified)

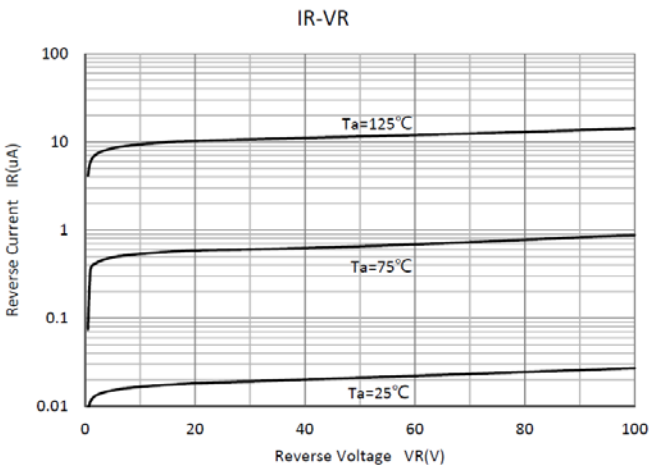
Item	Symbol	Unit	Conditions	MIN	MAX
Reverse Voltage	V_R	V	IR=100uA	100	
Maximum Instantaneous Forward Voltage	V_F	V	I_F=10mA, Ta=25℃		0.855
			I_F=100mA, Ta=25℃		1.2
Maximum DC Reverse Current	I_R	nA	V_R=20V		25
		uA	V_R=75V		5
Typical Junction Capacitance	C_J	pF	f=1.0MHz, V_R=0V		4
Reverse Recovery Time	T_{rr}	ns	I_F=10mA, V_R=6V, R_L=100Ω, I_{rr}=1mA		4

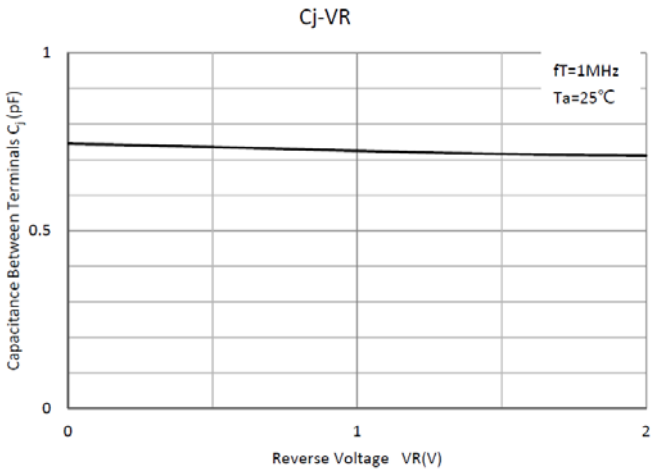
PACKAGING INFORMATION

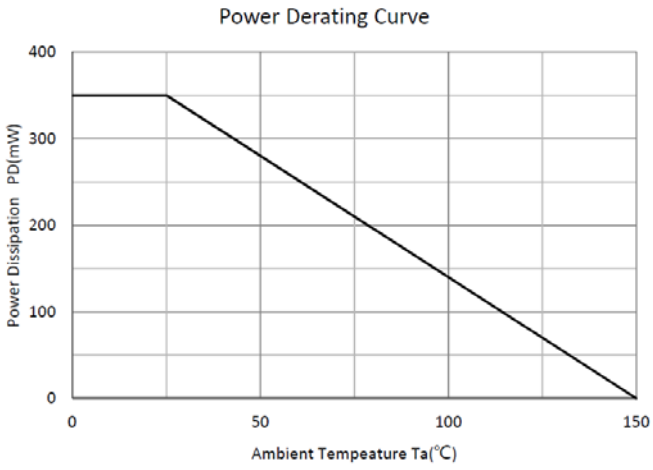
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MMBD4148	F2	Approximate 0.008	3000	30000	120000	7” reel

CHARACTERISTICS (TYPICAL)

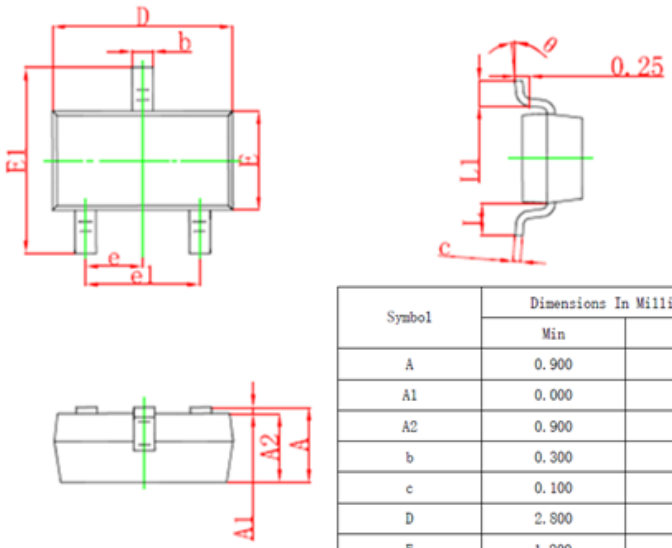








■ SOT-23 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550REF		0.022REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°