



MMBD4148Q

High Speed Switching Diode

Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- V_R 100V
- I_{FAV} 200mA
- Part no. with suffix "Q" means AEC-Q101 qualified

Applications

- Extreme fast switches
- Automotive

Mechanical Data

- **Case:** SOT-23
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denote K

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■ Maximum Ratings ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Reverse Voltage	V_R	V		100
Average Forward Current	I_{FAV}	mA		200
Repetitive Peak Forward Current	I_{FRM}	mA		300
Peak Forward Surge Current	I_{FSM}	A	Pulse width=1 us Pulse width=1 s	2 1
Power Dissipation	P_{tot}	mW		350
Thermal Resistance Junction to Ambient	R_{thJA}	K/W		357
Junction Temperature	T_j			-55 to +150

Storage Temperature Range



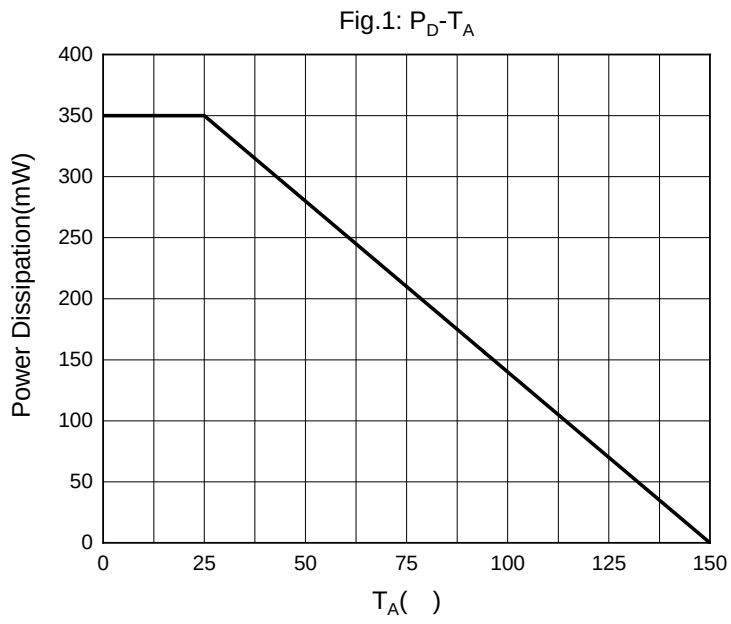
MMBD4148Q

■ Electrical Characteristics $T_a=25$ Unless otherwise specified

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN	MAX
Forward Voltage	V_F	V	$I_F=1mA$		0.715
			$I_F=10mA$		0.855
			$I_F=50mA$		1.0
			$I_F=100mA$		1.2
Reverse Current	I_R	nA	$V_R=20V$		25
		μA	$V_R=75V$		5
Breakdown Voltage	V_R	V	$I_R=100\mu A$	100	
Junction Capacitance	C_j	pF	$V_R=V_F=0V, f=1MHz$		4
Reverse Recovery Time	t_{rr}	ns	$I_F=10mA, I_{rr}=1mA, V_R=6V, R_L=100\Omega$		4

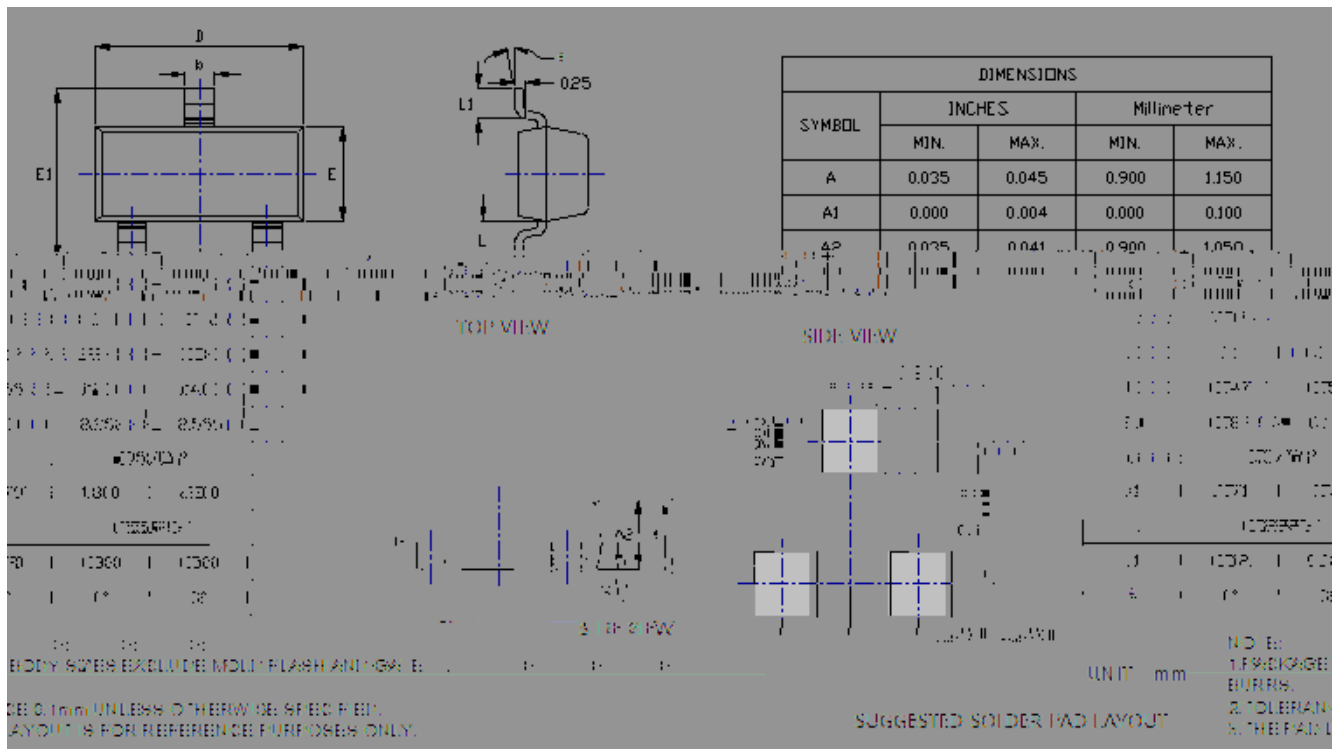
■ Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MMBD4148Q	F2	Approximate 0.010	3000	30000	120000	7" reel

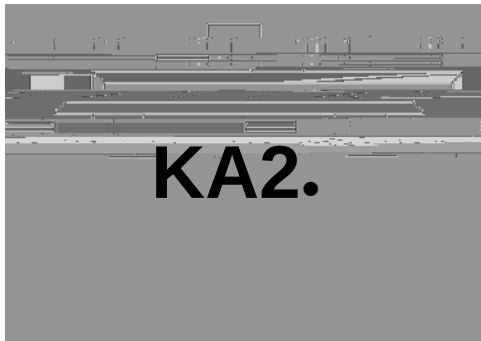




■ Outline Dimensions



■ Marking Information



Note:

1. All marking is at middle of the product body
2. All marking is in laser marking
3. Body color: Black



Disclaimer

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