

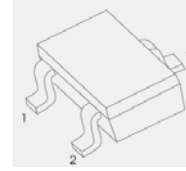


SOT-523 Plastic-Encapsulate Diodes

MMBD4148AT/CT/ST

SWITCHING DIODE

SOT-523



FEATURES

- Small Surface Mounting Type
- For General Purpose Switching Applications
- Fast Switching Speed
- High Conductance

MMBD4148AT	MMBD4148CT	MMBD4148ST
MARKING: KA3	MARKING: KA4	MARKING: KA5

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RM}	No-Repetitive Peak Reverse Voltage	100	V
V_{RWM}	Working Peak Reverse Voltage	75	V
$V_{R(RMS)}$	RMS Reverse Voltage	53	V
I_O	Continuous Forward Current	150	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @ $t=1\text{s}$ @ $t=1\mu\text{s}$	1	A
		2	
P_D	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	833	$^{\circ}\text{C/W}$
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=10\mu\text{A}$	75			V
Reverse current	I_R	$V_R=75\text{V}$			1	μA
		$V_R=20\text{V}$			25	nA
Forward voltage	V_F	$I_F=1\text{mA}$			0.715	V
		$I_F=10\text{mA}$			0.855	V
		$I_F=50\text{mA}$			1	V
		$I_F=150\text{mA}$			1.25	V
Total capacitance	C_{tot}	$V_R=0, f=1\text{MHz}$			2	pF
Reverse recovery time	t_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R, R_L=100\Omega$			4	ns