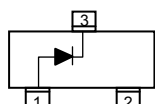


MMBD4148/SE/CC/CA

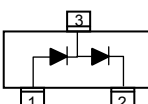
PRV : 100 Volts

Io : 600 mA

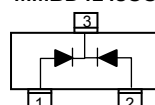
MMBD4148



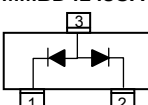
MMBD4148SE



MMBD4148CC



MMBD4148CA

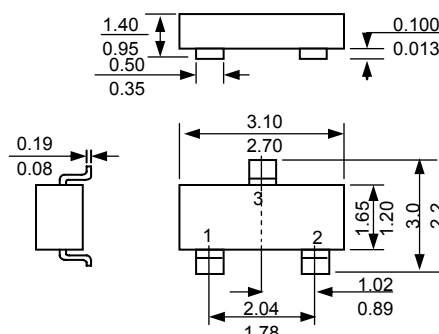


MECHANICAL DATA :

- * Case : SOT-23 plastic Case
- * MMBD4148SE Marking Code : 26
- * MMBD4148CC Marking Code : 27
- * MMBD4148CA Marking Code : 28

HIGH CONDUCTANCE ULTRA FAST DIODES

SOT-23



Dimensions in millimeters

MAXIMUM RATINGS AND THERMAL CHARACTERISTICS (Ta = 25 °C)

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Maximum Reverse Voltage	V_R	75	V
Maximum Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Maximum DC Forward Current	I_{FM}	600	mA
Maximum Recurrent Peak Forward Current	I_{FRM}	700	mA
Maximum Peak Forward Surge Current at Pulse width = 1 s Pulse width = 1 μ s	I_{FSM}	1.0 2.0	A
Total Power Dissipation	P_{tot}	350	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	357	°C/W
Junction Temperature Range	T_J	150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (Tj = 25 °C)

Parameter	Test Condition	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage	$I_R = 100 \mu A$ $I_R = 5 \mu A$	$V_{(BR)}$	100 75	- -	V
Forward Voltage	$I_F = 10 \text{ mA}$	V_F	-	1	V
Reverse Current	$V_R = 20 \text{ V}$ $V_R = 20 \text{ V}, T_a = 150 \text{ }^\circ\text{C}$ $V_R = 75 \text{ V}$	I_R	- - -	25 50 5	nA μA μA
Total Capacitance	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$	C_{tot}	-	4	pF
Reverse Recovery Time	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}$ $I_{rr} = 1 \text{ mA}, R_L = 100 \Omega$	T_{rr}	-	4	ns

RATINGS AND CHARACTERISTIC CURVES (MMBD4148/SE/CC/CA)

FIG.1 - POWER DERATING CURVE

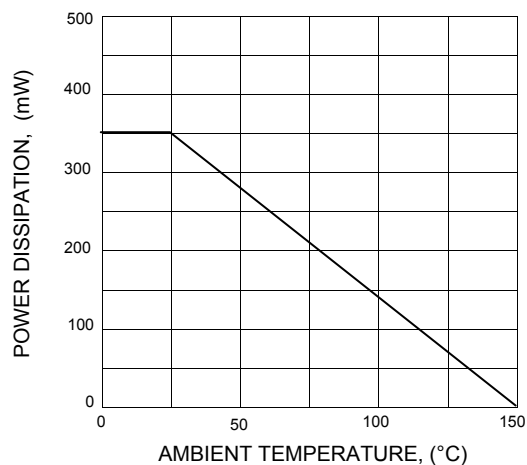


FIG.2 - TYPE CAPACITANCE VS. REVERSE VOLTAGE

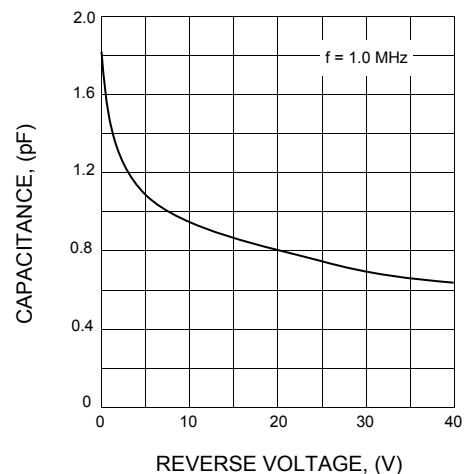


FIG.3 - FORWARD CHARACTERISTICS

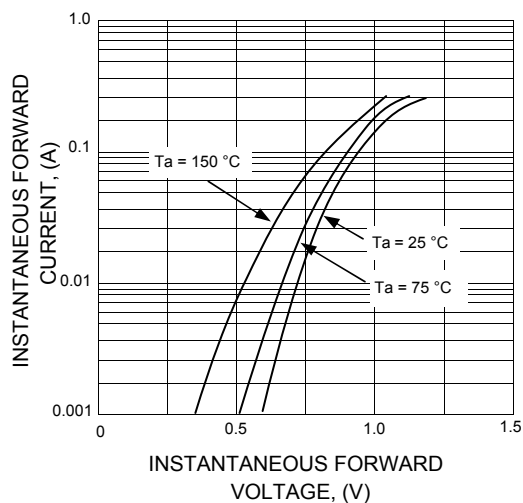


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

