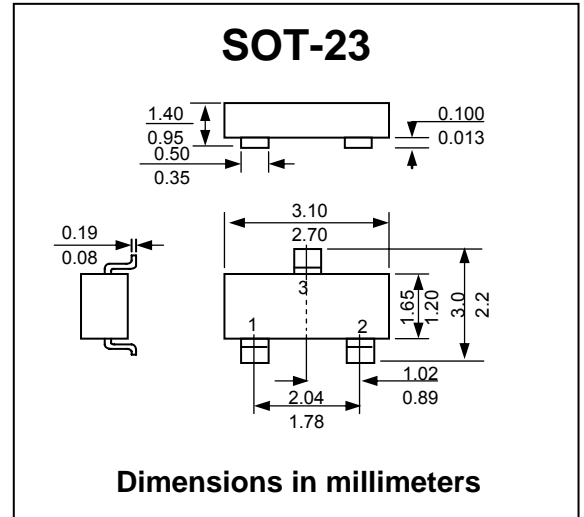
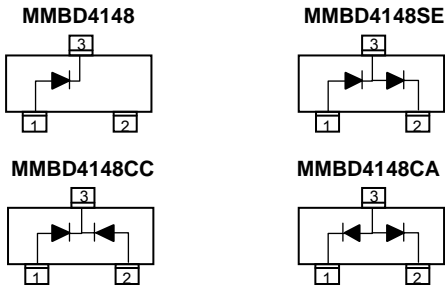


MMBD4148/SE/CC/CA

HIGH CONDUCTANCE ULTRA FAST DIODES

PRV : 100 Volts
Io : 600 mA



MECHANICAL DATA :

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

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	I_{FSM}	1.0	A
		2.0	
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	$I_R = 100 \mu A$	$V_{(BR)}$	100	-	V
	$I_R = 5 \mu A$		75	-	
Forward Voltage	$I_F = 10 \text{ mA}$	V_F	-	1	V
Reverse Current	$V_R = 20 \text{ V}$	I_R	-	25	nA
	$V_R = 20 \text{ V}, T_a = 150 \text{ °C}$		-	50	μA
	$V_R = 75 \text{ V}$		-	5	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

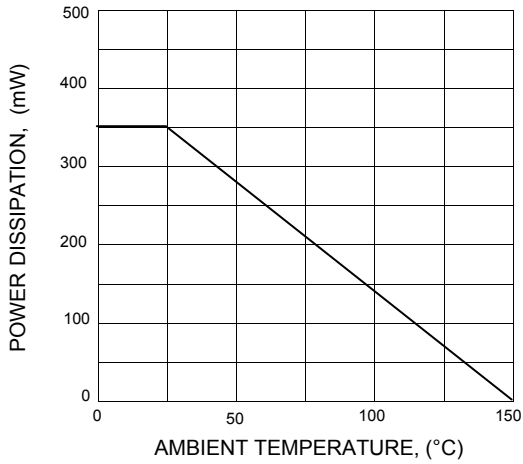


FIG.2 - TYPE CAPACITANCE VS. REVERSE VOLTAGE

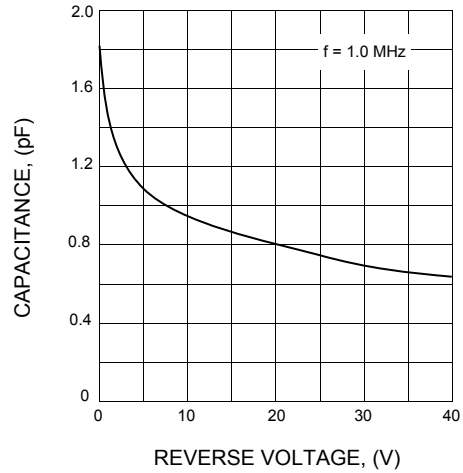


FIG.3 - FORWARD CHARACTERISTICS

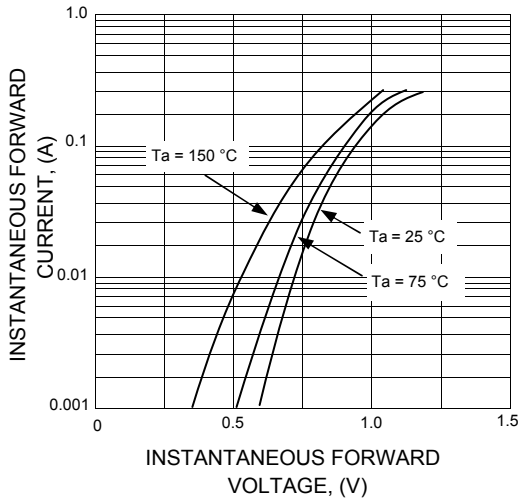


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

