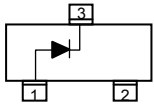


MMBD4148/SE/CC/CA

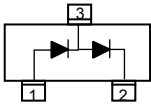
HIGH CONDUCTANCE ULTRA FAST DIODES

PRV : 100 Volts
I_o : 600 mA

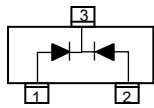
MMBD4148



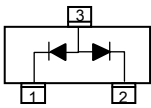
MMBD4148SE



MMBD4148CC

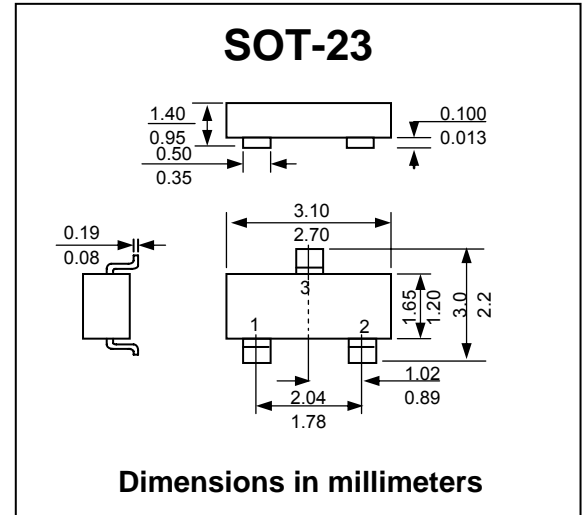


MMBD4148CA



MECHANICAL DATA :

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



MAXIMUM RATINGS AND THERMAL CHARACTERISTICS (T_a = 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 μs	I _{FSM}	1.0 2.0	A
Total Power Dissipation	P _{tot}	350	mW
Thermal Resistance Junction to Ambient Air	R _{θJA}	357	°C/W
Junction Temperature Range	T _J	150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (T_j = 25 °C)

Parameter	Test Condition	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage	I _R = 100 μA	V _(BR)	100	-	V
	I _R = 5 μA		75	-	
Forward Voltage	I _F = 10 mA	V _F	-	1	V
Reverse Current	V _R = 20 V	I _R	-	25	nA
	V _R = 20 V , T _a = 150 °C		-	50	μA
	V _R = 75 V		-	5	μA
Total Capacitance	V _R = 0 V , f = 1 MHz	C _{tot}	-	4	pF
Reverse Recovery Time	I _F = 10 mA V _R = 6 V I _{rr} = 1 mA , R _L = 100 Ω	T _{rr}	-	4	ns

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

FIG.1 - POWER DERATING CURVE

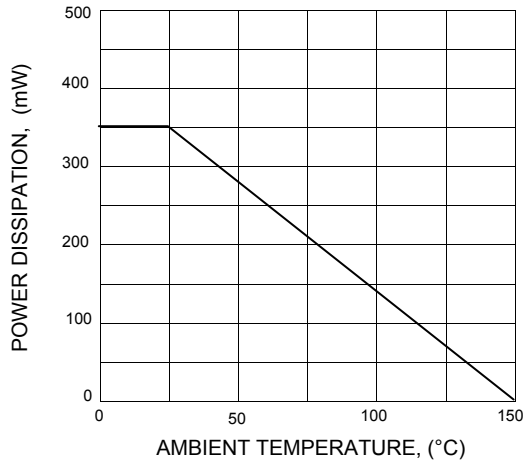


FIG.2 - TYPE CAPACITANCE VS. REVERSE VOLTAGE

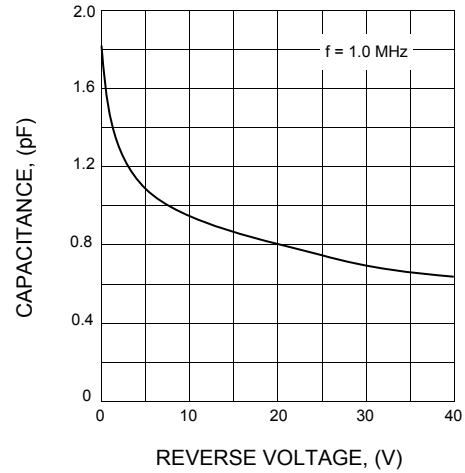


FIG.3 - FORWARD CHARACTERISTICS

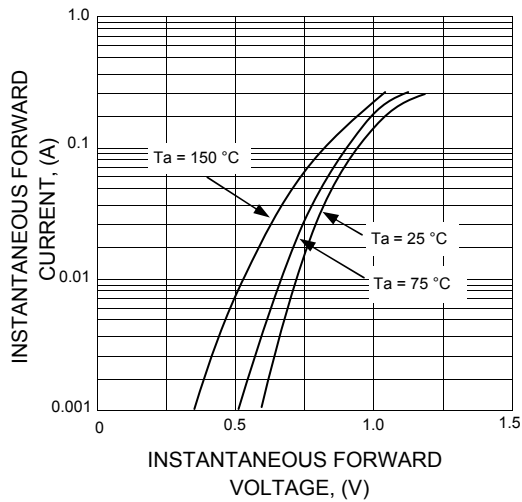


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

