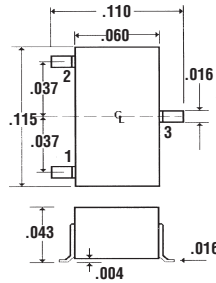
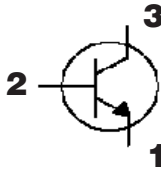
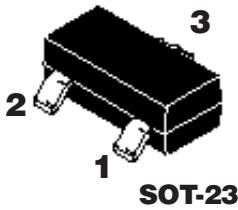




Description

Mechanical Dimensions

FMMT458



Maximum Ratings

Ratings	Symbol	Value	Units
Collector - Emitter Voltage	V_{CEO}	400	V
Collector - Base Voltage	V_{CBO}	400	V
Emitter - Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	225	mA
Total Device Dissipation $T_A = 25^\circ\text{C}$	P_D	500	mW
Junction and Storage Temperature	T_J, T_{STG}	-55 to 150	$^\circ\text{C}$

Electrical Characteristics @ 25°C

Characteristic	Symbol	Min	Max	Unit
Collector - Emitter Breakdown Voltage ($I_C = 10\text{mA}$)	$V_{BR(CEO)}$	400	---	V
Collector - Base Breakdown Voltage ($I_C = 100\mu\text{A}$)	$V_{BR(CBO)}$	400	---	V
Emitter - Base Breakdown Voltage ($I_E = 100\mu\text{A}$)	$V_{BR(EBO)}$	5.0	---	V
Collector Cutoff Current ($V_{CB} = 320\text{V}, I_E = 0$)	I_{CBO}	---	0.1	μA
Emitter Cutoff Current ($V_{EB} = 4.0\text{V}, I_C = 0$)	I_{EBO}	---	0.1	μA
Static Forward Current Transfer Ratio ($I_C = 1.0\text{ mA}, V_{CE} = 10\text{ V}$) ($I_C = 50\text{ mA}, V_{CE} = 10\text{ V}$) ($I_C = 100\text{ mA}, V_{CE} = 10\text{ V}$)	h_{FE}	100 100 15	300	
Collector - Emitter Saturation Voltage ($I_C = 50\text{ mA}, I_B = 6.0\text{ mA}$)	$V_{CE(sat)}$	---	0.5	V
Base - Emitter Saturation Voltage ($I_C = 50\text{ mA}, I_B = 5.0\text{ mA}$)	$V_{BE(sat)}$	---	0.9	V
Current - Gain - Bandwidth Product ($I_C = 10\text{ mA}, V_{CE} = 20\text{ V}, f = 100\text{ MHz}$)	f_T	50	---	MHz
Output Capacitance ($V_{CB} = 20\text{ V}, f = 1.0\text{ MHz}$)	C_{ob}	---	5.0	pF
Switching Characteristics ($I_C = 50\text{ mA}, V_{CC} = 100\text{ V}$) ($I_{B1} = 5.0\text{ mA}, I_{B2} = 10\text{ mA}$)	T_{on} T_{off}		35 (TYP) 2260 (TYP)	ns ns