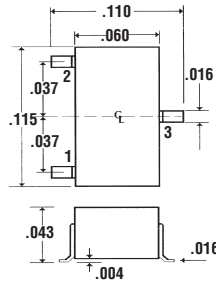
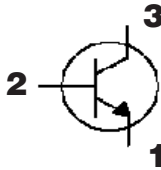
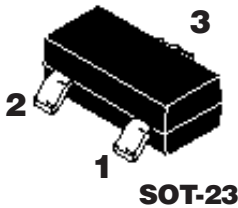




## Description

## 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	$\mu\text{A}$
Emitter Cutoff Current ( $V_{EB} = 4.0\text{V}, I_C = 0$ )	$I_{EBO}$	---	0.1	$\mu\text{A}$
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