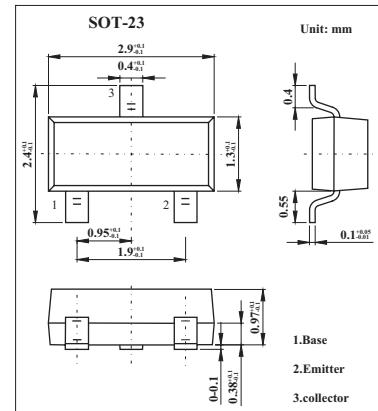


Medium Power Transistor

FMMT549

■ Features

- Low equivalent on-resistance.



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CBO}	-35	V
Collector-emitter voltage	V _{C EO}	-30	V
Emitter-base voltage	V _{EBO}	-5	V
Peak collector current	I _{CM}	-2	A
Collector current	I _C	-1	A
Base current	I _B	-200	mA
Power dissipation	P _{tot}	500	mW
Operating and storage temperature range	T _{j,T_{stg}}	-55 to +150	°C

FMMT549■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}$	-35			V
Collector-emitter breakdown voltage *	$V_{(BR)CEO}$	$I_C=-10\text{mA}$	-30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}$	-5			V
Collector cutoff current	I_{CBO}	$V_{CB}=-30\text{V}$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-4\text{V}$			-0.1	μA
Collector-emitter saturation voltage *	$V_{CE(\text{sat})}$	$I_C=-1\text{A}, I_B=-100\text{mA}$ $I_C=-2\text{A}, I_B=-200\text{mA}$		-0.25 -0.50	-0.5 -0.75	V
Base-emitter saturation voltage *	$V_{BE(\text{sat})}$	$I_C=-1\text{A}, I_B=-100\text{mA}$		-0.9	-1.25	V
Base-emitter voltage *	$V_{BE(\text{ON})}$	$I_C=-1\text{A}, V_{CE}=-2\text{V}$		-0.85	-1	V
DC current gain *	h_{FE}	$I_C=-50\text{mA}, V_{CE}=-2\text{V}$	70	200		
		$I_C=-1\text{A}, V_{CE}=-2\text{V}$	80	130		
		$I_C=-2\text{A}, V_{CE}=-2\text{V}$	40	80		
		$I_C=-500\text{mA}, V_{CE}=-2\text{V}$	100	160	300	
Current-gain-bandwidth product	f_T	$I_C=-100\text{mA}, V_{CE}=-5\text{V}, f=100\text{MHz}$	100			MHz
Output capacitance	C_{obo}	$V_{CB}=-10\text{V}, f=1\text{MHz}$			25	pF
Switching times	t_{on}	$V_{CB}=-10\text{V}, f=1\text{MHz}$		50		ns
	t_{off}	$I_C=-500\text{mA}, V_{CC}=-10\text{V}, I_{B1}=I_{B2}=-50\text{mA}$		300		ns

* Pulse test: $t_p \leq 300 \mu\text{s}$; $d \leq 0.02$.

■ Marking

Marking	549
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