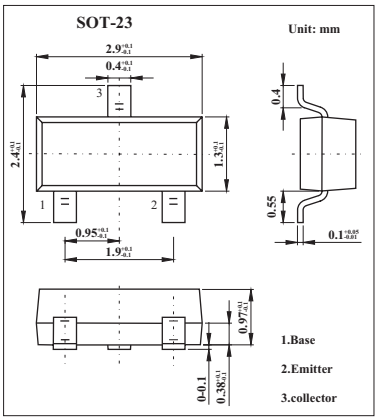
Medium Power Transistor

FMMT549



■ Features

● Low equivalent on-resistance.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-35	V
Collector-emitter voltage	V_{CEO}	-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	℃

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■ Electrical Characteristics Ta = 25℃

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

* Pulse test: tp ⩽ 300 μs; d ⩽ 0.02.

■ Marking

Marking	549