

Medium Power Transistor

FMMT549

■ Features

- Low equivalent on-resistance.

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-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	$^\circ\text{C}$

FM549

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR)CBO	IC=-100μA	-35			V
Collector-emitter breakdown voltage *	V(BR)CEO	IC=-10mA	-30			V
Emitter-base breakdown voltage	V(BR)EBO	IE=-100μA	-5			V
Collector cutoff current	ICBO	VCE=-30V			-0.1	μA
Emitter cut-off current	IEBO	VEB=-4V			-0.1	μA
Collector-emitter saturation voltage *	VCE(sat)	IC=-1A, IB=-100mA IC=-2A, IB=-200mA		-0.25 -0.50	-0.5 -0.75	V
Base-emitter saturation voltage *	VBE(sat)	IC=-1A, IB=-100mA		-0.9	-1.25	V
Base-emitter voltage *	VBE(ON)	IC=-1A, VCE=-2V		-0.85	-1	V
DC current gain *	hFE	IC=-50mA, VCE=-2V	70	200		
		IC=-1A, VCE=-2V	80	130		
		I =-2A, V =-2V	40	80		
		IC=-500mA, VCE=-2V	100	160	300	
Current-gain-bandwidth product	fT	IC=-100mA, VCE=-5V, f=100MHz	100			MHz
Output capacitance	Cobo	VCE=-10V, f=1MHz			25	pF
Switching times	ton	VCE=-10V, f=1MHz		50		ns
	toff	IC=-500mA, VCC=-10V, IB1=IB2=-50mA		300		ns

* Pulse test: tp ≤ 300 μs; d ≤ 0.02.

■ Marking

Marking	549
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