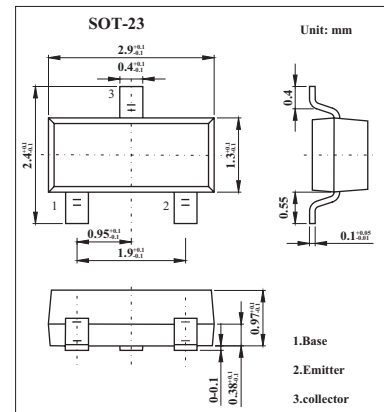


Medium Power Transistor

FMMT549A

■ 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_{CE0}	-30	V
Emitter-base voltage	V_{EB0}	-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	$^\circ\text{C}$

FMMT549A

■ 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=-100mA, IB=-1A			-0.3	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		
		Ic=-2A, VCE=-2V	40	80		
		Ic=-500mA, VCE=-2V	150	200	500	
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	59A
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