

Medium Power Transistor

FMMT449

■ Features

- Low equivalent on-resistance.

■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	50	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 +125	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =1mA, I _E =0	50			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =10mA, I _B =0	30			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =100μA, I _C =0	5			V
Collector cutoff current	I _{CB0}	V _{CB} =40V, I _E =0			0.1	μA
		V _{CB} =40V, T _{amb} =100°C			10	μA
Emitter cut-off current	I _{EBO}	V _{EB} =4V, I _C =0			0.1	μA
Collector-emitter saturation voltage *	V _{CE(sat)}	I _C =1A, I _B =100mA			0.5	V
		I _C =2A, I _B =200mA			1.0	V
Base-emitter saturation voltage *	V _{BE(sat)}	I _C =1A, I _B =100mA			1.25	V
Base-emitter voltage *	V _{BE(ON)}	I _C =1A, V _{CE} =2V			1.0	V
Static Forward Current Transfer Ratio	h _{FE}	I _C =50mA, V _{CE} =2V*	70			
		I _C =500mA, V _{CE} =2V*	100		300	
		I _C =1A, V _{CE} =2V*	80			
		I _C =2A, V _{CE} =2V*	40			
Current-gain-bandwidth product	f _T	I _C =50mA, V _{CE} =10V, f=100MHz	150			MHz
Output capacitance	C _{ob0}	V _{CB} =10V, f=1MHz			15	pF

* Pulse width=300μs. Duty cycle ≤2%

■ Marking

Marking	449
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