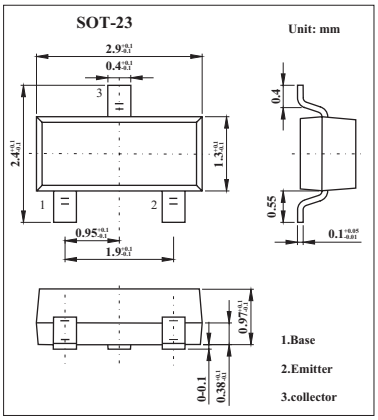
Medium Power Transistor

FMMT491



■ Features

● Low equivalent on-resistance.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	80	V
Collector-emitter voltage	V_{CEO}	60	V
Emitter-base voltage	V_{EBO}	5	V
Peak collector current	I_{CM}	2	A
Collector current	I_C	1	A
Power dissipation	P_{tot}	500	mW
Operating and storage temperature range	T_j,T_{stg}	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA	80			V
Collector-emitter breakdown voltage *	$V_{(BR)CEO}$	I_C=10mA	60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA	5			V
Collector cutoff current	I_{CBO}	V_{CB}=60V			100	nA
Emitter cut-off current	I_{EBO}	V_{EB}=4V			100	nA
Collector-emitter saturation voltage *	$V_{CE(sat)}$	I_C=500mA,I_B=50mA I_C=1A,I_B=100mA			0.25 0.50	V
Base-emitter saturation voltage *	$V_{BE(sat)}$	I_C=1A,I_B=100mA			1.1	V
Base-emitter voltage *	$V_{BE(ON)}$	I_C=1A,V_{CE}=5V			1.0	V
Static Forward Current Transfer Ratio *	h_{FE}	I_C=1mA,V_{CE}=5V	100			
		I_C=500mA,V_{CE}=5V	100		300	
		I_C=1A,V_{CE}=5V	80			
		I_C=2A,V_{CE}=5V	30			
Current-gain-bandwidth product	f_T	I_C=50mA,V_{CE}=10V,f=100MHz	150			MHz
Output capacitance	C_{obo}	V_{CB}=10V,f=1MHz			10	pF

* Pulse test: tp ⩽ 300 μs; d ⩽ 0.02.

■ Marking

Marking	491