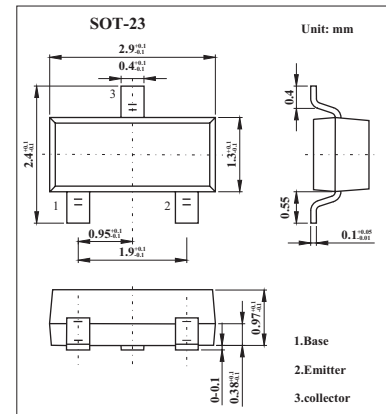


Medium Power Transistor

FM51

■ Features

- 60 Volt V_{CE0} .
- 1 Amp continuous current.



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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-80	V
Collector-emitter voltage	V_{CE0}	-60	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 +200	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}$	-80			V
Collector-emitter breakdown voltage *	$V_{(BR)CEO}$	$I_C = -10\text{mA}$	-60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu\text{A}$	-5			V
Collector cutoff current	I_{CBO}	$V_{CB} = -60\text{V}$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4\text{V}$			0.1	μA
Collector-emitter saturation voltage *	$V_{CE(sat)}$	$I_C = -150\text{mA}, I_B = -15\text{mA}$			-0.35	V
Base-emitter saturation voltage *	$V_{BE(sat)}$	$I_C = -150\text{mA}, I_B = -15\text{mA}$			-1.1	V
Static Forward Current Transfer Ratio *	h_{FE}	$I_C = -150\text{mA}, V_{CE} = -10\text{V}$	50		150	
		$I_C = -1\text{A}, V_{CE} = -10\text{V}$	10			
Current-gain-bandwidth product	f_T	$I_C = -50\text{mA}, V_{CE} = -10\text{V}, f = 100\text{MHz}$	150			MHz
Output capacitance	C_{ob0}	$V_{CB} = -10\text{V}, f = 1\text{MHz}$			25	pF

* Pulse test: $t_p \leq 300 \mu\text{s}; d \leq 0.02$.

■ Marking

Marking	551
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