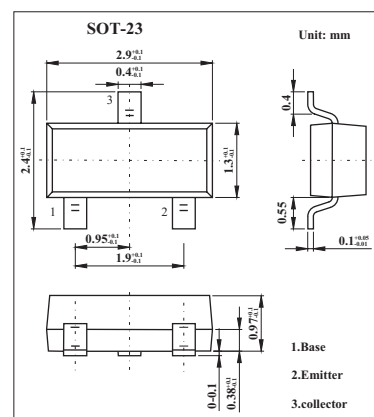


Power High Performance Transistor

FMMT495

■ Features

- SOT23 NPN silicon planar medium

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	170	V
Collector-emitter voltage	V_{CE0}	150	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	$^\circ\text{C}$

FMMT495

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A$	170			V
Collector-emitter breakdown voltage *	$V_{(BR)CEO}$	$I_C=10mA$	150			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A$	5			V
Collector Cut-Off Currents	I_{CBO}	$V_{CB}=150V$			100	nA
Collector Cut-Off Currents	I_{CES}	$V_{CE}=150V$			100	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=4V$			100	nA
Collector-emitter saturation voltage *	$V_{CE(sat)}$	$I_C=250mA, I_B=25mA$ $I_C=500mA, I_B=50mA$			0.2 0.3	V
Base-emitter saturation voltage *	$V_{BE(sat)}$	$I_C=500mA, I_B=50mA$			1.0	V
Base-emitter voltage *	$V_{BE(ON)}$	$I_C=500mA, V_{CE}=10V$			1.0	V
Static Forward Current Transfer Ratio	h_{FE}	$I_C=1mA, V_{CE}=10V$	100			
		$I_C=250mA, V_{CE}=10V^*$	100		300	
		$I_C=500mA, V_{CE}=10V^*$	50			
		$I_C=1A, V_{CE}=10V^*$	10			
Transition Frequency	f_T	$I_C=50mA, V_{CE}=10V, f=100MHz$	100			MHz
Collector-Base Breakdown Voltage	C_{obo}	$V_{CB}=10V, f=1MHz$			10	pF

* Pulse test: $t_p = 300 \mu s$; $d \leq 0.02$.

■ Marking

Marking	495
---------	-----