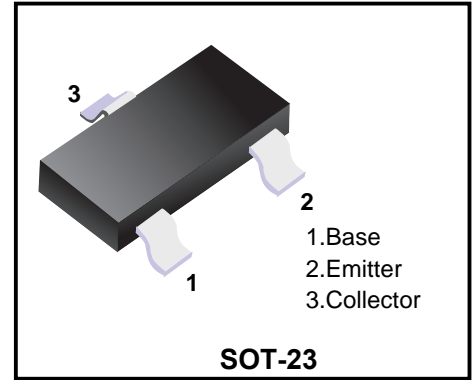


**NPN Silicon Epitaxial Planar Transistor**

Medium Power High Performance Transistor



Marking Code	
MMBT495	495

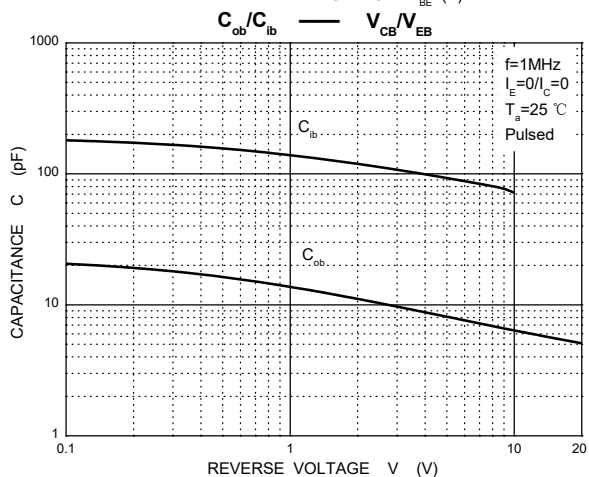
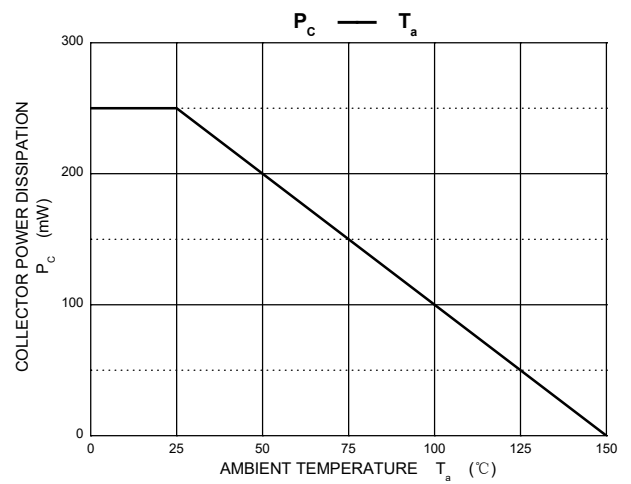
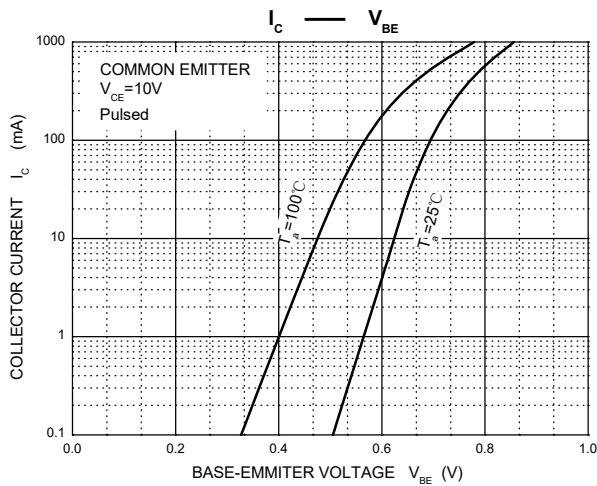
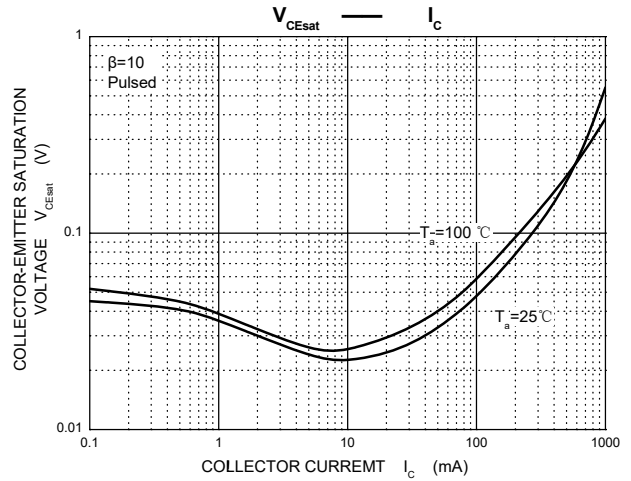
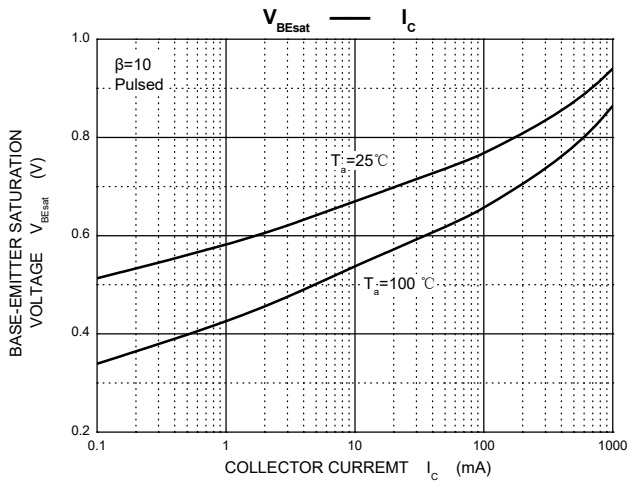
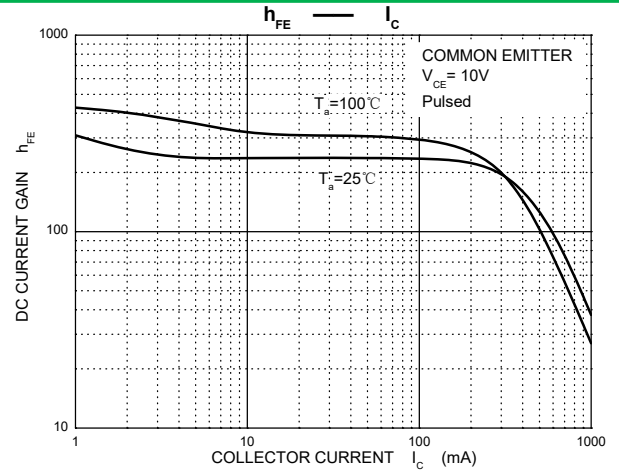
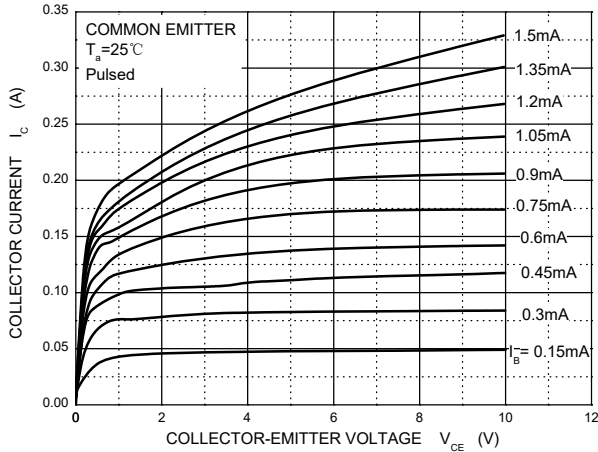
**Absolute Maximum Ratings (Ta = 25°C)**

Parameter	Symbol	Value	Unit
Collector Base Voltage	$V_{CBO}$	170	V
Collector Emitter Voltage	$V_{CEO}$	150	V
Emitter Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	1	A
Peak Pulse Current	$I_{CM}$	2	A
Power Dissipation	$P_{tot}$	200	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	- 55 to + 150	°C

**Characteristics at Ta = 25°C**

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $V_{CE} = 10\text{ V}$ , $I_C = 1\text{ mA}$	$h_{FE}$	100	-	-
at $V_{CE} = 10\text{ V}$ , $I_C = 250\text{ mA}$	$h_{FE}$	100	300	-
at $V_{CE} = 10\text{ V}$ , $I_C = 500\text{ mA}$	$h_{FE}$	50	-	-
at $V_{CE} = 10\text{ V}$ , $I_C = 1\text{ A}$	$h_{FE}$	10	-	-
Collector Base Cutoff Current at $V_{CB} = 150\text{ V}$	$I_{CBO}$	-	100	nA
Collector Emitter Cutoff Current at $V_{CE} = 150\text{ V}$	$I_{CES}$	-	100	nA
Emitter Base Cutoff Current at $V_{EB} = 4\text{ V}$	$I_{EBO}$	-	100	nA
Collector Base Breakdown Voltage at $I_C = 100\text{ }\mu\text{A}$	$V_{(BR)CBO}$	170	-	V
Collector Emitter Breakdown Voltage at $I_C = 10\text{ mA}$	$V_{(BR)CEO}$	150	-	V
Emitter Base Breakdown Voltage at $I_E = 100\text{ }\mu\text{A}$	$V_{(BR)EBO}$	5	-	V
Collector Emitter Saturation Voltage at $I_C = 250\text{ mA}$ , $I_B = 25\text{ mA}$	$V_{CEsat}$	-	0.2	V
at $I_C = 500\text{ mA}$ , $I_B = 50\text{ mA}$	$V_{CEsat}$	-	0.3	V
Base Emitter Saturation Voltage at $I_C = 500\text{ mA}$ , $I_B = 50\text{ mA}$	$V_{BEsat}$	-	1	V
Base Emitter On Voltage at $V_{CE} = 10\text{ V}$ , $I_C = 500\text{ mA}$	$V_{BE(on)}$	-	1	V
Transition Frequency at $V_{CE} = 10\text{ V}$ , $I_C = 50\text{ mA}$ , $f = 100\text{ MHz}$	$f_T$	100	-	MHz
Collector Output Capacitance at $V_{CB} = 10\text{ V}$ , $f = 1\text{ MHz}$	$C_{ob}$	-	10	pF

**Static Characteristic**



**Ordering information**

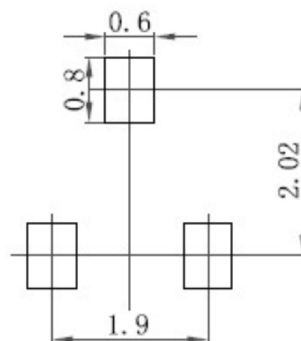
Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel,7"reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

**Package Dimensions**

**SOT-23**

Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.15	35	45
A1	0.1		3.9	
bp	0.38	0.48	15	19
C	0.09	0.15	3.54	5.9
D	2.8	3.0	110	118
E	1.2	1.4	47	55
E	1.9		75	
E1	0.95		37	
HE	2.1	2.55	83	100
Lp	0.15	0.45	5.9	18
Q	0.45	0.55	18	22
v	0.2		7.9	
W	0.1		4	

**The recommended mounting pad size**



## Disclaimer

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