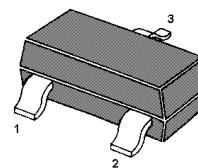


# MMBTSA1298

## PNP Silicon Epitaxial Planar Transistor

for low frequency power amplifier and power switching applications

The transistor is subdivided into two groups, O and Y according to its DC current gain.



1.BASE 2.EMITTER 3.COLLECTOR

SOT-23 Plastic Package

### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	30	V
Collector Emitter Voltage	$-V_{CEO}$	25	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	800	mA
Base Current	$-I_B$	160	mA
Power Dissipation	$P_{tot}$	200	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{Stg}$	-55 to +150	$^\circ\text{C}$

### Characteristics at $T_{amb}=25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $-V_{CE} = 1\text{ V}$ , $-I_C = 100\text{ mA}$	O	$h_{FE}$	100	-	200	-
	Y	$h_{FE}$	160	-	320	-
		$h_{FE}$	40	-	-	-
at $-V_{CE} = 1\text{ V}$ , $-I_C = 800\text{ mA}$						
Collector Cutoff Current at $-V_{CB} = 30\text{ V}$	$-I_{CBO}$	-	-	0.1	$\mu\text{A}$	
Emitter Cutoff Current at $-V_{EB} = 5\text{ V}$	$-I_{EBO}$	-	-	0.1	$\mu\text{A}$	
Collector Saturation Voltage at $-I_C = 500\text{ mA}$ , $-I_B = 20\text{ mA}$	$-V_{CE(sat)}$	-	-	0.4	V	
Base Emitter Voltage at $-V_{CE} = 1\text{ V}$ , $-I_C = 10\text{ mA}$	$-V_{BE}$	0.5	-	0.8	V	
Collector Emitter Breakdown Voltage at $-I_C = 10\text{ mA}$	$-V_{(BR)CEO}$	25	-	-	V	
Emitter Base Breakdown Voltage at $-I_E = 0.1\text{ mA}$	$-V_{(BR)EBO}$	5	-	-	V	
Transition Frequency at $-V_{CE} = 5\text{ V}$ , $-I_C = 10\text{ mA}$	$f_T$	-	120	-	MHz	
Collector Output Capacitance at $-V_{CB} = 10\text{ V}$ , $f = 1\text{ MHz}$	$C_{ob}$	-	13	-	pF	

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