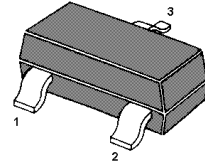


MMBTSC3876

NPN Silicon Epitaxial Planar Transistor

for general purpose application

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



1.BASE 2.EMITTER 3.COLLECTOR
TO-236 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	35	V
Collector Emitter Voltage	V_{CEO}	30	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	500	mA
Base Current	I_B	50	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 $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit		
DC Current Gain at V _{CE} = 1 V, I _C = 100 mA	O	h _{FE}	70	-	140	-	
	Y	h _{FE}	120	-	240	-	
	G	h _{FE}	200	-	400	-	
	at V _{CE} = 6 V, I _C = 400 mA	O	h _{FE}	25	-	-	-
		Y, G	h _{FE}	40	-	-	-
Collector Cutoff Current at V _{CB} = 35 V	I _{CBO}	-	-	0.1	μA		
Emitter Cutoff Current at V _{EB} = 5 V	I _{EBO}	-	-	0.1	μA		
Collector Emitter Saturation Voltage at I _C = 100 mA, I _B = 10 mA	V _{CE(sat)}	-	-	0.25	V		
Base Emitter Voltage at V _{CE} = 1 V, I _C = 100 mA	V _{BE}	-	-	1	V		
Transition Frequency at V _{CE} = 6 V, I _C = 20 mA	f _T	-	300	-	MHz		
Collector Base Capacitance at V _{CB} = 6 V, f = 1 MHz	C _{cb}	-	7	-	pF		

