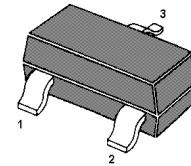


MMBTSC5343

NPN Silicon Epitaxial Planar Transistor

for general small signal amplifier.

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



1.BASE 2.EMITTER 3.COLLECTOR
SOT-23 Plastic Package

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

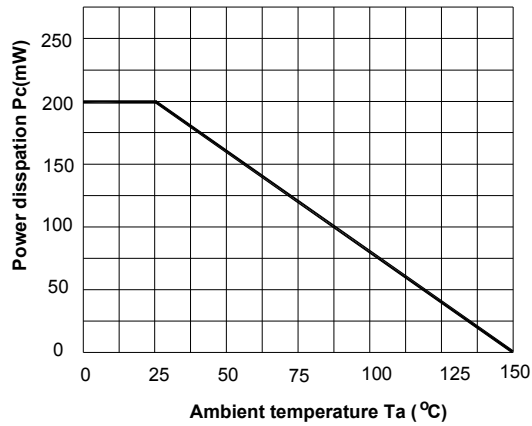
Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_{C}	150	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_{j}	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 + 150	$^\circ\text{C}$

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

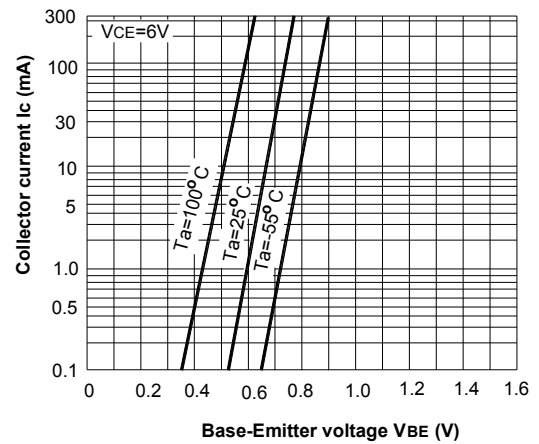
Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at V _{CE} = 6 V, I _C = 1 mA Current Gain Group	O	h _{FE}	70	-	140	-
	Y	h _{FE}	120	-	240	-
	G	h _{FE}	200	-	400	-
	L	h _{FE}	300	-	700	-
Collector Base Cutoff Current at V _{CB} = 30 V	I _{CBO}	-	-	500	nA	
Emitter Base Cutoff Current at V _{EB} = 4 V	I _{EBO}	-	-	500	nA	
Collector Base Breakdown Voltage at I _C = 50 μA	V _{(BR)CBO}	50	-	-	V	
Collector Emitter Breakdown Voltage at I _C = 1 mA	V _{(BR)CEO}	50	-	-	V	
Emitter Base Breakdown Voltage at I _E = 50 μA	V _{(BR)EBO}	5	-	-	V	
Collector Emitter Saturation Voltage at I _C = 50 mA, I _B = 5 mA	V _{CE(sat)}	-	-	400	mV	
Transition Frequency at V _{CE} = 12 V, I _C = 2 mA	f _T	-	180	-	MHz	
Output Capacitance at V _{CB} = 12 V, f = 1 MHz	C _{ob}	-	2	-	pF	

TOP DYNAMIC

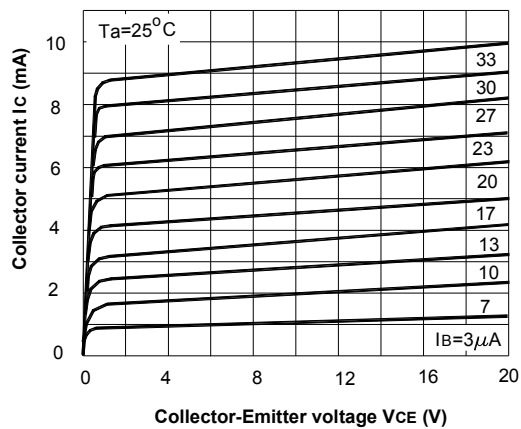
Pc-Ta



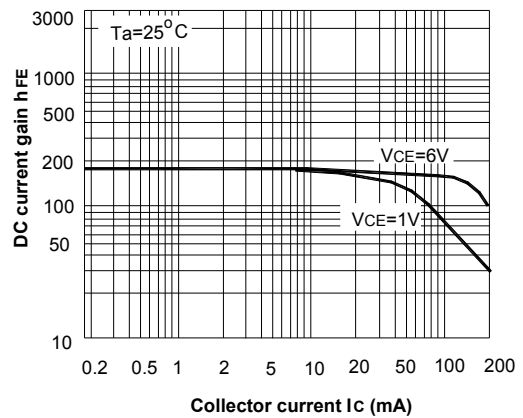
Ic-VBE



Ic-VCE



hFE-IC



VCE(sat)-Ic

