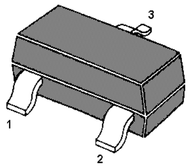
MMBTSC5343

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

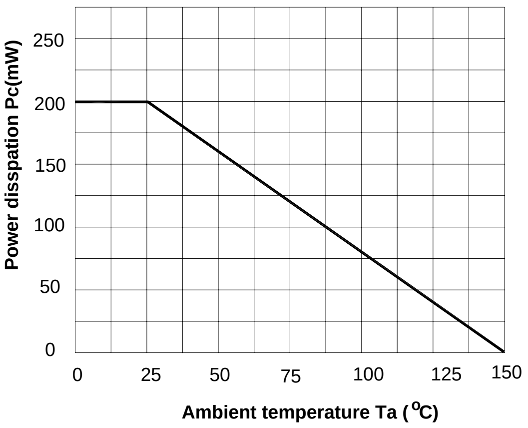
Absolute Maximum Ratings (T_a = 25 °C)

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	°C
Storage Temperature Range	T_{stg}	- 55 + 150	°C

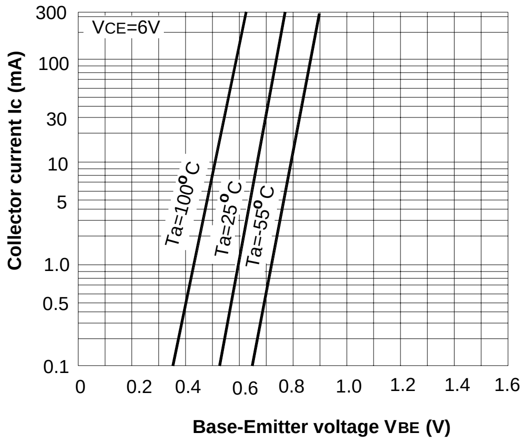
Characteristics at T_{amb}=25 °C

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

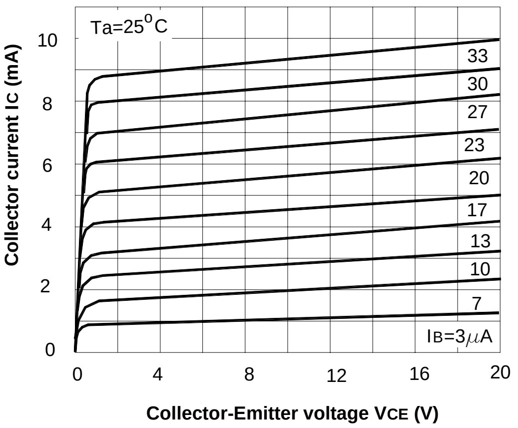
Pc-Ta



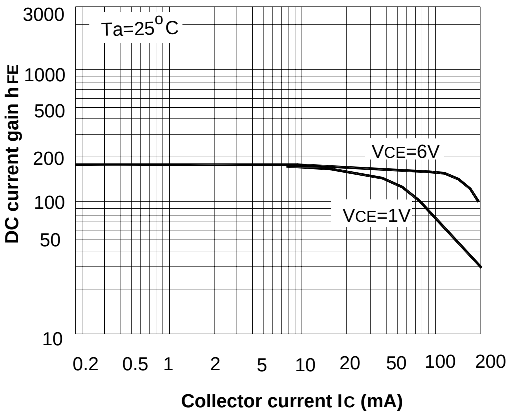
IC-VBE



IC-VCE



hFE-IC



VCE(sat)-IC