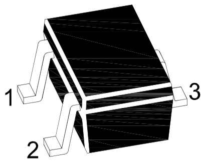
MMBTSC4627E

NPN Silicon Epitaxial Planar Transistor



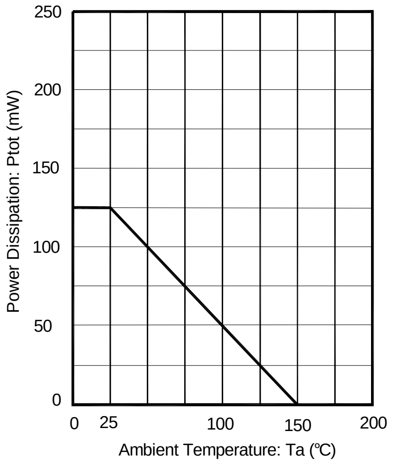
1.Base 2.Emitter 3.Collector
SOT-523 Plastic Package

Absolute Maximum Ratings (T_a = 25 °C)

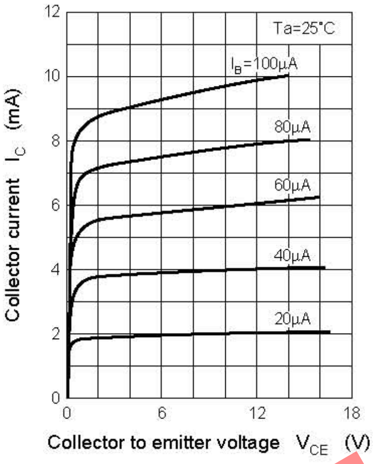
Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	30	V
Collector Emitter Voltage	V_{CEO}	20	V
Emitter Base Voltage	V_{EBO}	3	V
Collector Current	I_C	15	mA
Power Dissipation	P_{tot}	125	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

Characteristics at T_a = 25 °C

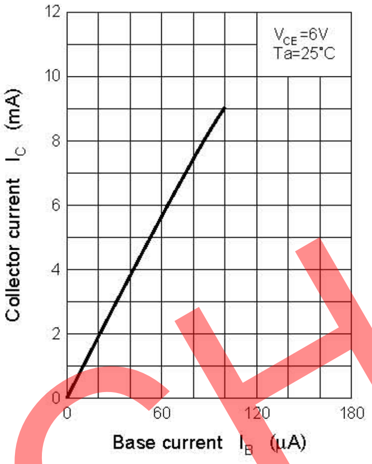
Parameter		Symbol	Min.	Max.	Unit
DC Current Gain at V_{CE} = 6 V, I_C = 1 mA Current Gain Group	B	h_{FE}	40	110	-
	C	h_{FE}	65	160	-
	D	h_{FE}	100	260	-
Collector Base Cutoff Current at V_{CB} = 12 V		I_{CBO}	-	50	nA
Collector Base Breakdown Voltage at I_C = 10 µA		$V_{BR(CBO)}$	30	-	V
Collector Emitter Breakdown Voltage at I_C = 1 mA		$V_{(BR)CEO}$	20	-	V
Emitter Base Breakdown Voltage at I_E = 10 µA		$V_{BR(EBO)}$	3	-	V
Collector Emitter Saturation Voltage at I_C = 10 mA, I_B = 1 mA		$V_{CE(sat)}$	-	0.5	V
Transition Frequency at V_{CE}= 6 V, $-I_C$ = 1 mA, f = 200 MHz		f_T	450	-	MHz
Collector Base Capacitance at V_{CB} = 10 V, f = 1 MHz		C_{ob}	-	1.7	pF



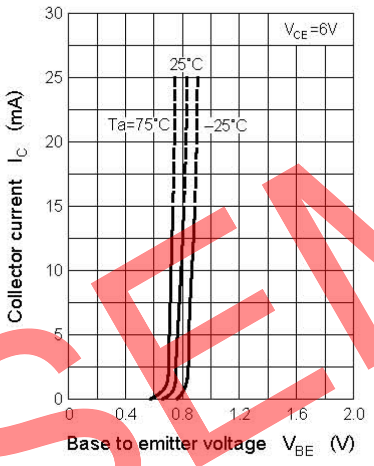
I_C — V_{CE}



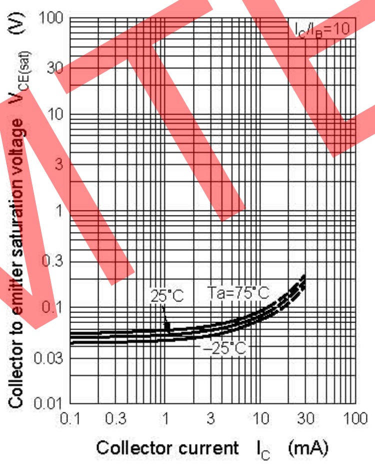
I_C — I_B



I_C — V_{BE}



$V_{CE(sat)}$ — I_C



h_{FE} — I_C