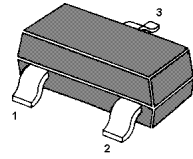


MMBTSC2787

NPN Silicon Epitaxial Planar Transistor

for FM RF amp, mixer, osc, converter and IF amplifier.

The transistor is subdivided into three groups M, L, and K 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_{CB0}	50	V
Collector Emitter Voltage	V_{CEO}	30	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	30	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 $T_{amb}=25^\circ\text{C}$

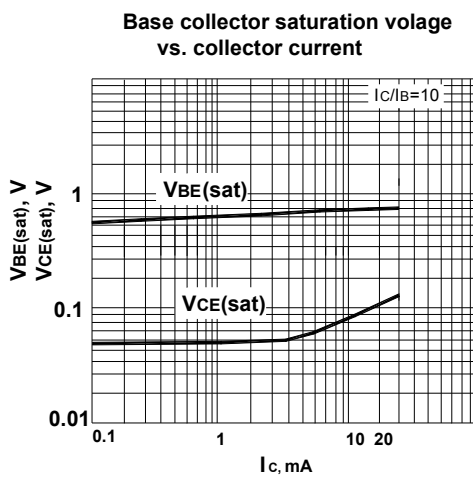
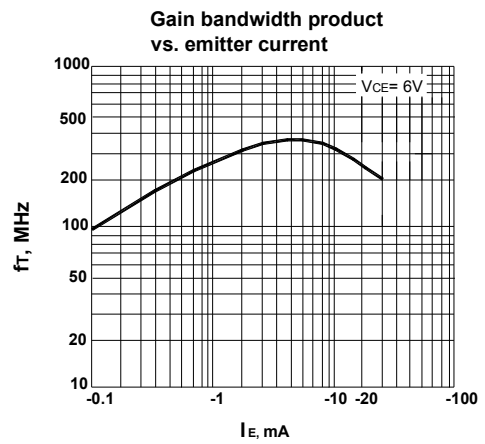
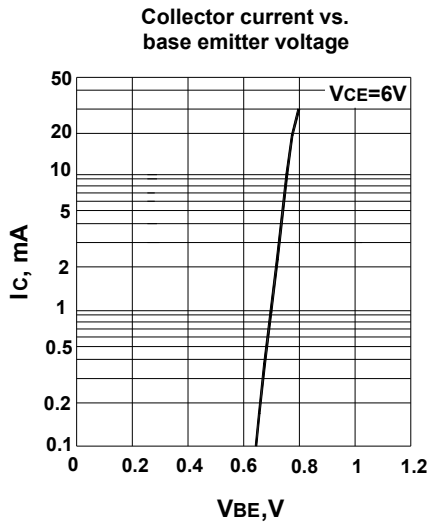
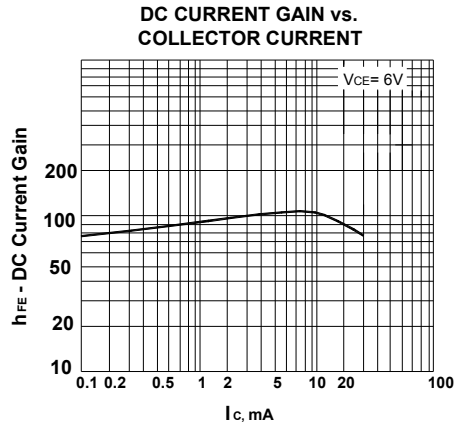
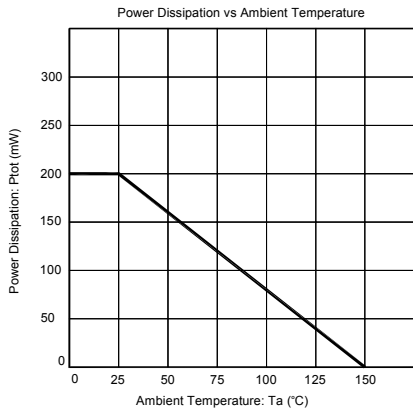
Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE} = 6\text{ V}$, $I_C = 1\text{ mA}$ Current Gain Group	M h_{FE}	40	-	80	-
	L h_{FE}	60	-	120	-
	K h_{FE}	90	-	300	-
Collector Base Cutoff Current at $V_{CB} = 50\text{ V}$	I_{CB0}	-	-	100	nA
Emitter Base Cutoff Current at $V_{EB} = 5\text{ V}$	I_{EBO}	-	-	100	nA
Collector Emitter Saturation Voltage at $I_C = 10\text{ mA}$, $I_B = 1\text{ mA}$	$V_{CE(sat)}$	-	-	0.3	V
Base Emitter Voltage at $V_{CE} = 6\text{ V}$, $I_C = 1\text{ mA}$	V_{BE}	0.65	-	0.75	V
Gain Bandwidth Product at $V_{CE} = 6\text{ V}$, $I_E = -1\text{ mA}$	f_T	-	250	-	MHz
Output Capacitance at $V_{CB} = 6\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	-	2.2	pF

TOP DYNAMIC



Dated: 13/08/2012 Rev: 01

MMBTSC2787



TOP DYNAMIC



ISO14001 : 2004 Certificate No. 121505007
 ISO 9001 : 2008 Certificate No. 50144012
 OHSAS 18001 : 2007 Certificate No. 06131598008
 IECQ QC 080000 Certificate No. E24180007 KMZ

Dated: 13/08/2012 Rev: 01