

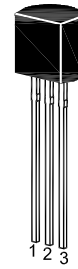
ST 2SC2787

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.

On special request, these transistors can be manufactured in different pin configurations.



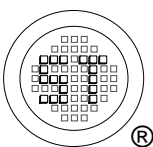
1. Emitter 2. Collector 3. Base
TO-92 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	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}	250	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

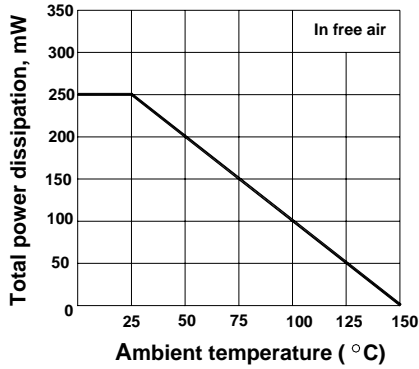
Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $V_{CE} = 6\text{ V}$, $I_C = 1\text{ mA}$	Current Gain Group M	h_{FE}	40	-	80	-
	L	h_{FE}	60	-	120	-
	K	h_{FE}	90	-	180	-
Collector Base Cutoff Current at $V_{CB} = 50\text{ V}$	I_{CBO}	-	-	100	nA	
Emitter Base Cutoff Current at $V_{EB} = 5\text{ V}$	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	



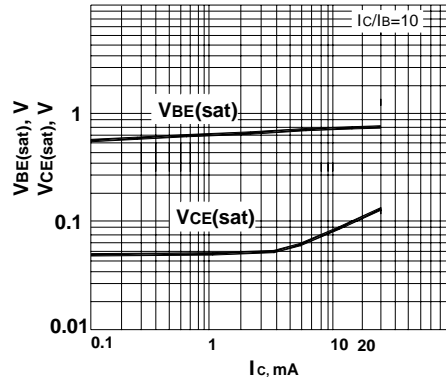
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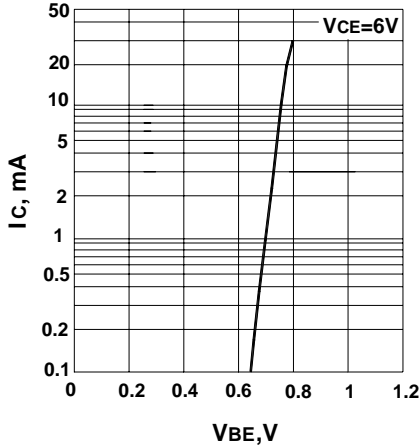
Total power dissipation vs. ambient temperature



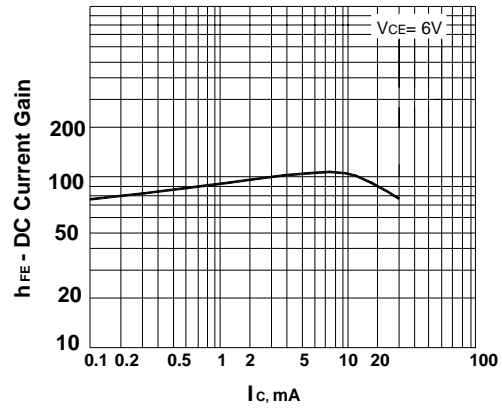
Base collector saturation voltage vs. collector current



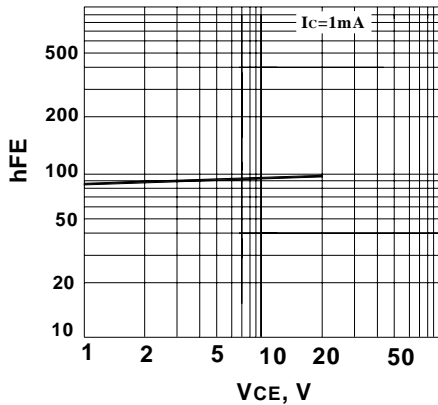
Collector current vs. base emitter voltage



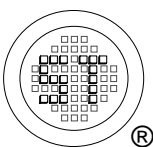
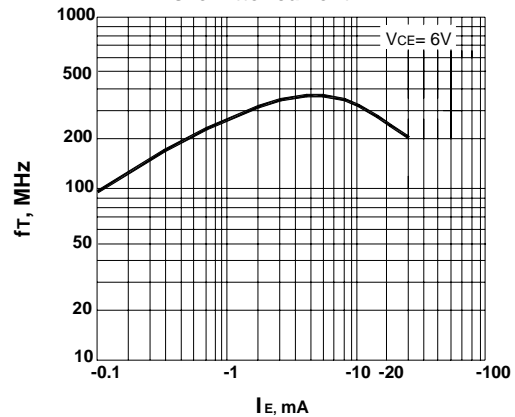
DC CURRENT GAIN vs. COLLECTOR CURRENT



DC current gain vs. collector emitter voltage



Gain bandwidth product vs. emitter current



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