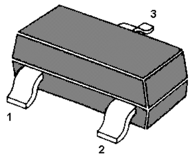
MMBTSC930

NPN Silicon Epitaxial Planar Transistor

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

The transistor is subdivided into four groups, C, D, E and F, according to its DC current gain.

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



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}	30	V
Collector Emitter Voltage	V_{CEO}	20	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	30	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	- 55 to + 125	°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 C	h_{FE}	40	-	80	-
D	h_{FE}	60	-	120	-
E	h_{FE}	100	-	200	-
F	h_{FE}	160	-	320	-
Collector Base Cutoff Current at V_{CB} = 10 V	I_{CBO}	-	-	1	µA
Emitter Base Cutoff Current at V_{EB} = 4 V	I_{EBO}	-	-	1	µA
Gain Bandwidth Product at V_{CE} = 6 V, I_C = 1 mA	f_T	-	300	-	MHz
Reverse Transfer Capacitance at V_{CB} = 6 V, f = 1 MHz	Cre	-	-	1.8	pF
Turn-on Time at V_{IN} = +12 V, V_{BE} = -3 V,appointed circuit	t_{on}	-	30	-	ns
Turn-off Time at V_{IN} = -12 V, V_{BE} = +3 V, appointed circuit	t_{off}	-	30	-	ns