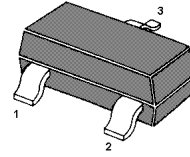


NPN Silicon Epitaxial Planar Transistor

for low frequency power amplifier applications
and power switching application.

The transistor is subdivided into two groups, O
and Y according to its DC current gain.



1. Base 2. Emitter 3. Collector
SOT-23 Plastic Package

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

	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	35	V
Collector Emitter Voltage	V_{CEO}	30	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	800	mA
Base Current	I_B	160	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 $T_{amb}=25\text{ }^{\circ}\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE}=1\text{V}$, $I_C=100\text{mA}$ Current Gain Group O Y	h_{FE}	100	-	200	-
	h_{FE}	160	-	320	-
	h_{FE}	40	-	-	-
at $V_{CE}=1\text{V}$, $I_C=800\text{mA}$					
Collector Cutoff Current at $V_{CB}=30\text{V}$	I_{CBO}	-	-	100	nA
Emitter Cutoff Current at $V_{EB}=5\text{V}$	I_{EBO}	-	-	100	nA
Collector Emitter Breakdown Voltage at $I_C=10\text{mA}$	$V_{(BR)CEO}$	30	-	-	V
Emitter Base Breakdown Voltage at $I_E=1\text{mA}$	$V_{(BR)EBO}$	5	-	-	V
Collector Emitter Saturation Voltage at $I_C=500\text{mA}$, $I_B=20\text{mA}$	$V_{CE(sat)}$	-	-	0.5	V
Transition Frequency at $V_{CE}=5\text{V}$, $I_C=10\text{mA}$, $f=100\text{MHz}$	f_T	-	120	-	MHz
Base Emitter Voltage at $I_C=10\text{mA}$, $V_{CE}=1\text{V}$	V_{BE}	0.5	-	0.8	V
Collector Output Capacitance at $V_{CB}=10\text{V}$, $f=1\text{MHz}$	C_{OB}	-	13	-	pF

