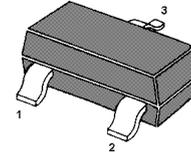


NPN Silicon Epitaxial Planar Transistor

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

Parameter	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_S	-55 to +150	$^\circ\text{C}$

Characteristics at $T_{amb}=25\text{ °C}$

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

