G8051S NPN EPITAXIAL TRANSISTOR

LOW VOLTAGE HIGH CURRENT SMALL SIGNAL NPN TRANSISTOR

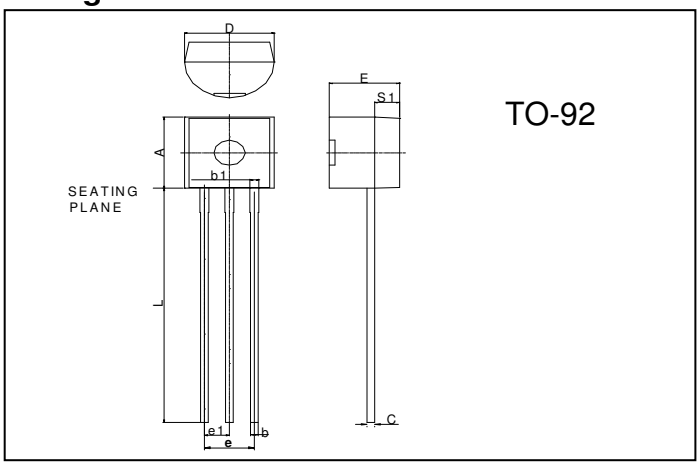
Description

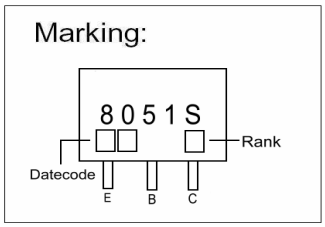
The G8051S is a low voltage high current small signal NPN transistor, designed for Class B push-pull audio amplifier for portable radio and general purpose applications.

Features

*Collector current up to 700mA
*Collector –Emitter voltage up to 20V
*Complementary to G8551S

Package Dimensions





REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.45	4.7	D	4.44	4.7
S_1	1.02	-	E	3.30	3.81
b	0.36	0.51	L	12.70	-
b_1	0.36	0.76	e1	1.150	1.390
C	0.36	0.51	e	2.42	2.66

Absolute Maximum Ratings (Ta = 25℃,unless otherwise specified)

Parameter		Ratings	Unit
Collector to Base Voltage	V_{CBO}	25	V
Collector to Emitter Voltage	V_{CEO}	20	V
Emitter to Base Voltage	V_{EBO}	5	V
Collect Current(DC)	I_C	0.7	A
Junction Temperature	Tj	+150	℃
Storage Temperature Range	T_{STG}	-55 ~ +150	℃
Total Power Dissipation	P_D	625	mW

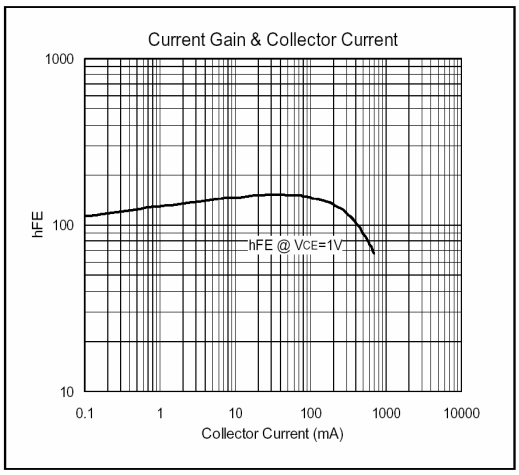
Electrical Characteristics(Ta = 25℃,unless otherwise specified)

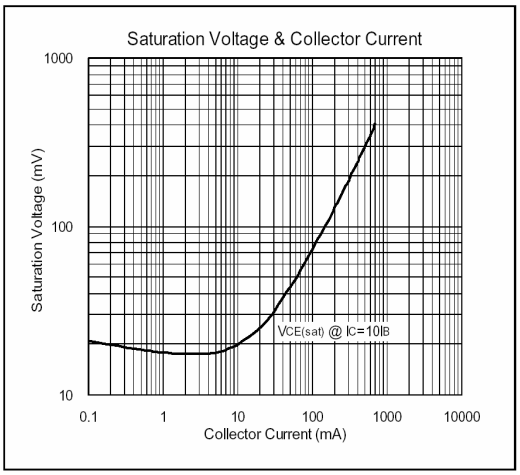
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV_{CBO}	25	-	-	V	I_C=10uA,I_E=0
BV_{CEO}	20	-	-	V	I_C=1mA,I_B=0
BV_{EBO}	5	-	-	V	I_E=10uA,I_C=0
I_{CBO}	-	-	1	uA	V_{CB}=20V, I_E=0
I_{EBO}	-		100	nA	V_{BE}=6V,I_C=0
hFE1	100	-	400		V_{CE}=1V,I_C=150mA
hFE2	-	100	-		V_{CE}=1V,I_C=150mA
$V_{CE(sat)}$	-	-	0.5	V	I_C=500mA,I_B=50mA
$V_{BE(on)}$	-	-	1	V	VCE=1V,I_C=150mA
fT	150	-	-	MHz	V_{CE}=10V,I_C=20mA, ,f=100MHz
Cob	-	10	-	pF	V_{CB}=10V, I_E=0A,f=1MHz

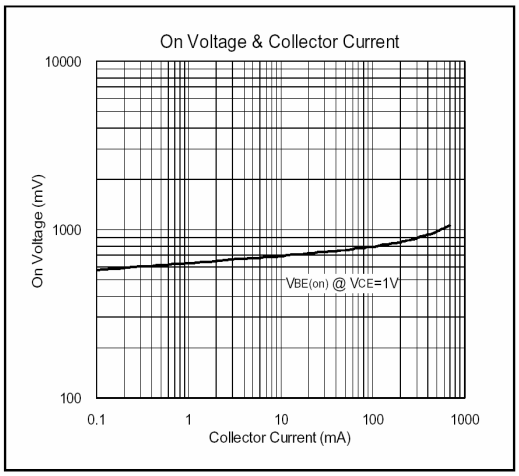
Classification Of h_{FE1}

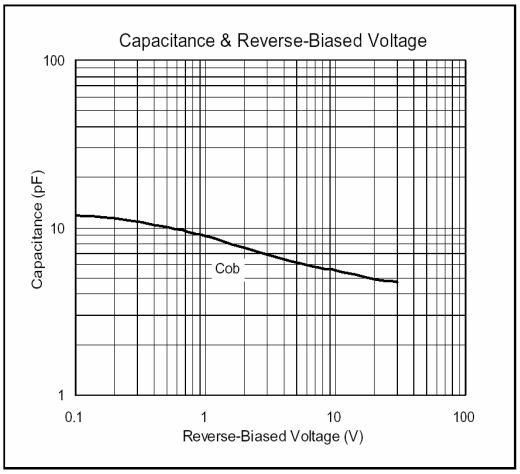
Rank	C	D	E
Range	100-180	160-300	250-400

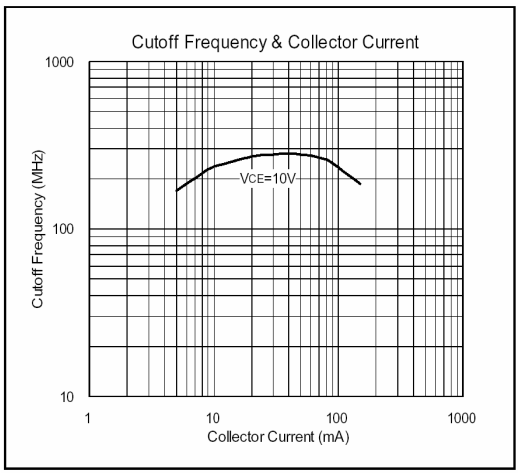
Characteristics Curve

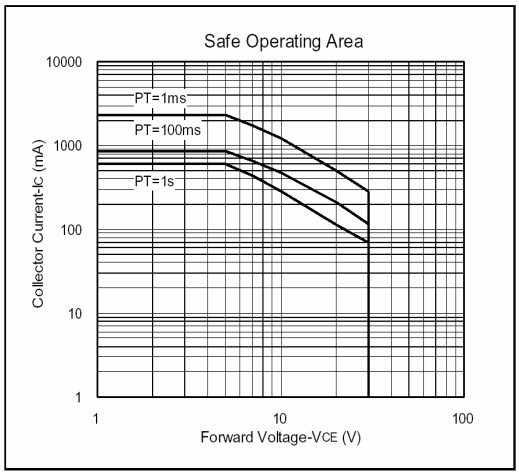












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