

RoHS Compliant Product
A suffix of "-C" specifies halogen free

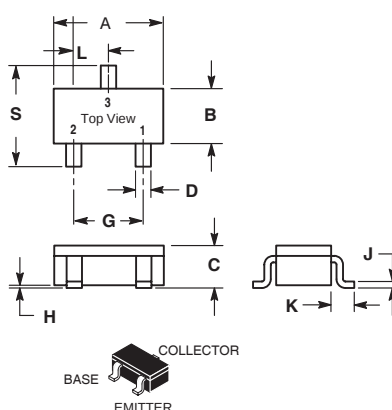
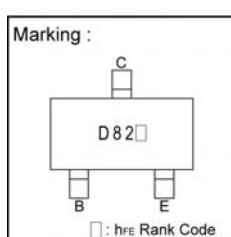
DESCRIPTION

The SMBT882SS is a medium power low voltage transistor, designed for audio power amplifier, DC-DC converter and voltage regulator.

FEATURES

- High current output up to 3A
- Low saturation voltage

PACKAGE DIMENSIONS



SC-59		
Dim	Min	Max
A	2.70	3.10
B	1.30	1.70
C	1.00	1.30
D	0.35	0.50
G	1.90 REF.	
H	0.00	0.10
J	0.10	0.26
K	0.20	0.60
L	1.25	1.65
S	2.25	3.00
All Dimension in mm		

ABSOLUTE MAXIMUM RATINGS at Ta = 25°C

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	3.0	A
Total Power Dissipation	P_d	750	mW
Junction, Storage Temperature	T_J, T_{STG}	+150, -55 ~ +150	°C

CHARACTERISTICS at Ta = 25°C

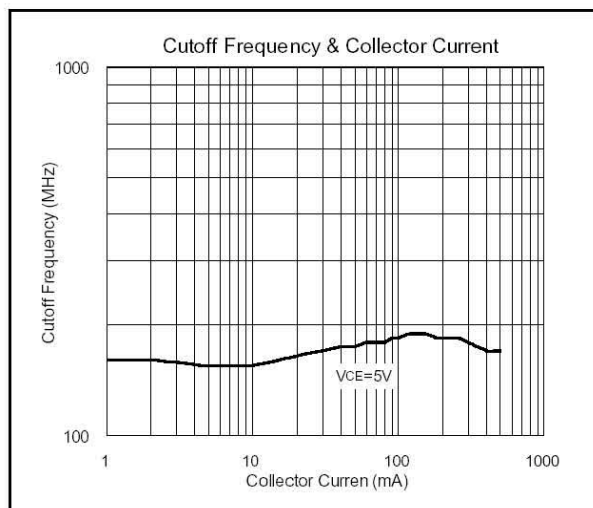
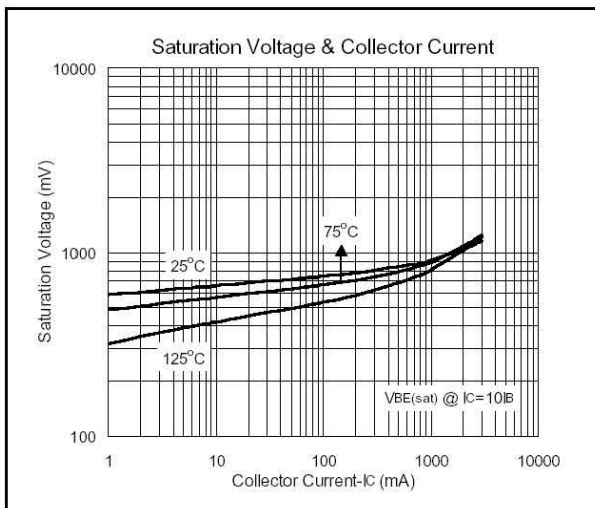
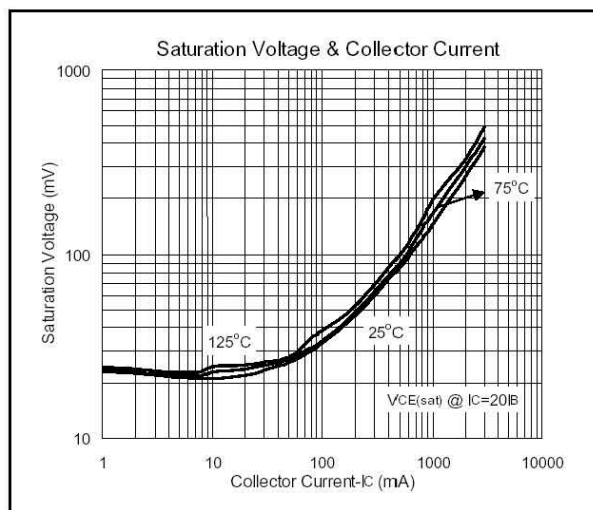
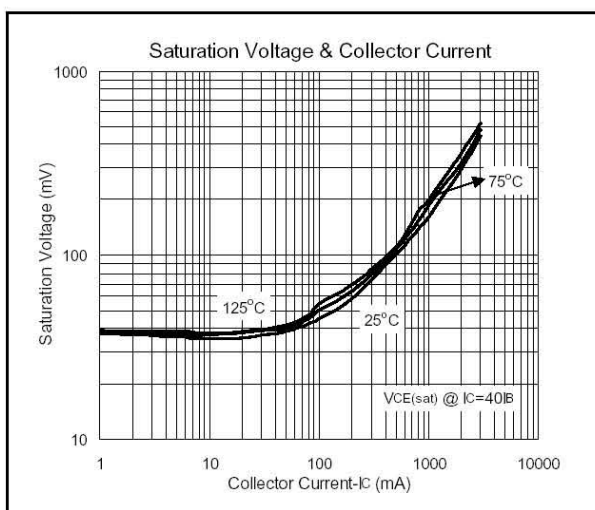
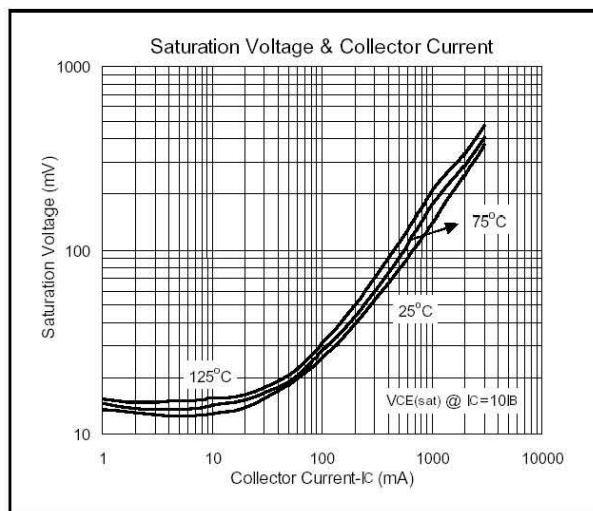
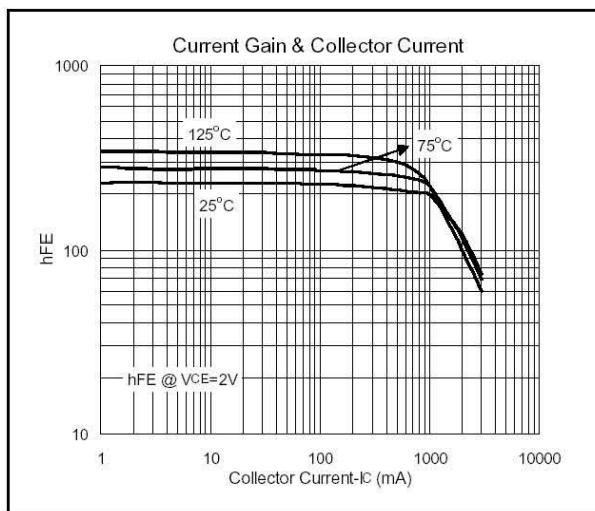
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVC_{BO}	40	-	-	V	$I_C=100\mu A, I_E=0$
BVC_{EO}	30	-	-	V	$I_C=1mA, I_B=0$
BVE_{BO}	5.0	-	-	V	$I_E=10\mu A, I_C=0$
IC_{BO}	-	-	1.0	μA	$V_{CB}=30V, I_E=0$
IE_{BO}	-	-	1.0	μA	$V_{EB}=3V, I_C=0$
* $V_{CE(sat)}$	-	-	0.5	V	$I_C=2A, I_B=200mA$
* $V_{BE(sat)}$	-	-	2.0	V	$I_C=2A, I_B=200mA$
* h_{FE1}	30	-	-		$V_{CE}=2V, I_C=20mA$
* h_{FE2}	100	-	500		$V_{CE}=2V, I_C=1A$
f_T	-	90	-	MHz	$V_{CE}=5V, I_C=100mA, f=100MHz$
C_{ob}	-	45	-	pF	$V_{CB}=10V, f=1MHz$

* Pulse Test: Pulse Width $\leq 380\mu s$, Duty Cycle $\leq 2\%$

CLASSIFICATION OF h_{FE2}

Rank	Q	P	E
Range	100 - 200	160 - 320	200 - 500

CHARACTERISTICS CURVE



CHARACTERISTICS CURVE (cont'd)

