

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

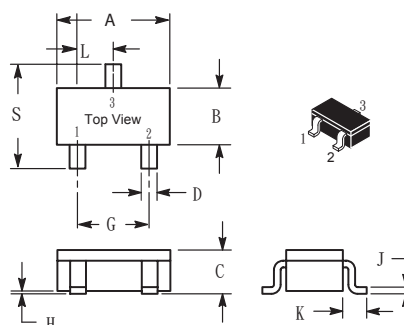
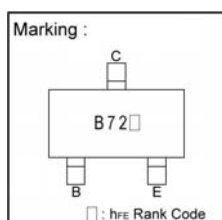
DESCRIPTION

The SMBT772SS is a medium power low voltage transistor, designed for audio power amplifier, DC-DC converter and voltage regulator.

FEATURES

- High current output up to -3 A
- 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	0.85	1.15
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	V
Collector Current	I_C	-3	A
Total Power Dissipation	P_d	750	mW
Junction, Storage Temperature	T_J, T_{STG}	+150, -55 ~ +150	°C

CHARACTERISTICS at Ta = 25°C

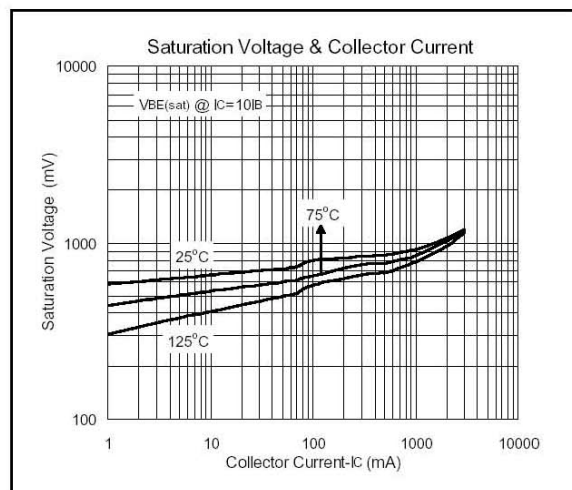
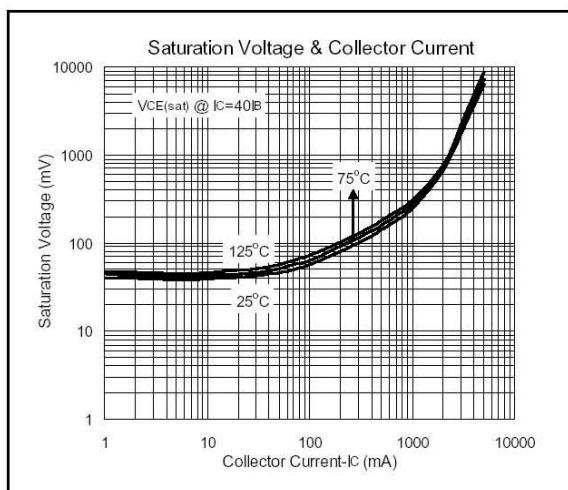
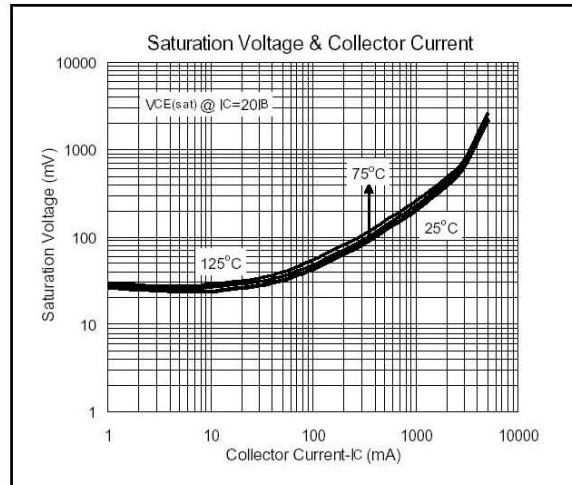
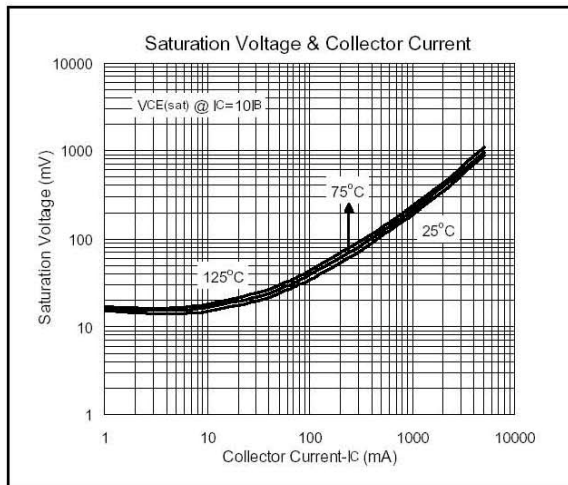
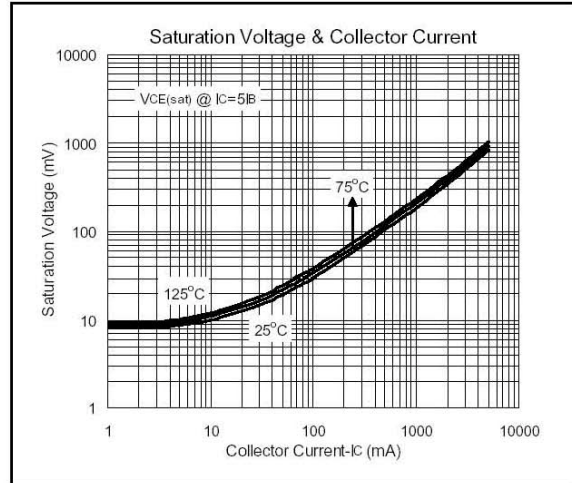
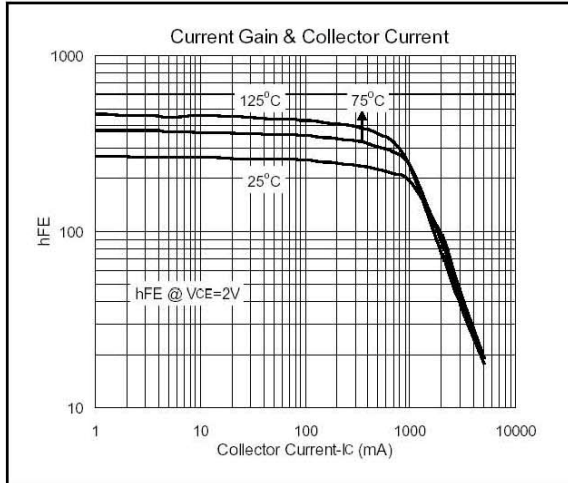
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV_{CBO}	-40	-	-	V	$I_C = -100\mu A, I_E = 0$
BV_{CEO}	-30	-	-	V	$I_C = -1mA, I_B = 0$
BV_{EBO}	-5	-	-	V	$I_E = -10\mu A, I_C = 0$
I_{CBO}	-	-	-1	μA	$V_{CB} = -30V, I_E = 0$
I_{EBO}	-	-	-1	μA	$V_{EB} = -3V, I_C = 0$
* $V_{CE(sat)}$	-	-	-0.5	V	$I_C = -2A, I_B = -200mA$
* $V_{BE(sat)}$	-	-1.0	-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	-	80	-	MHZ	$V_{CE} = -5V, I_C = -100mA, f = 100MHZ$
C_{ob}	-	55	-	pF	$V_{CB} = -10V, f = 1MHZ$

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

CLASSIFICATION OF hFE2

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

CHARACTERISTICS CURVE



CHARACTERISTICS CURVE (cont'd)

