

Description

Silicon PNP transistor in a SOT-89 Plastic Package

Applications

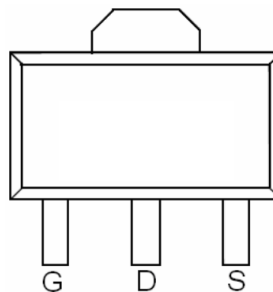
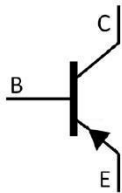
Color TV vert.and class B sound output applications.

Features

- High voltage
- Large continuous collector current capability
- Complementary pair with 2SC2383T
- Halogen-free product

Symbol	Parameter	Max	Unit
V_{CE0}	collector-emitter voltage	-160	V
I_c	collector current (DC)	-1.0	A

Equivalent Circuit & Pinning



SOT-89 top view

PIN1: Base

PIN 2: Collector

PIN 3: Emitter

hFE Classifications & Marking

h _{FE} Classifications Symbol	R	O	Y
h _{FE} Range	60~120	100~200	160~320
Marking	H13R	H13O	H13Y

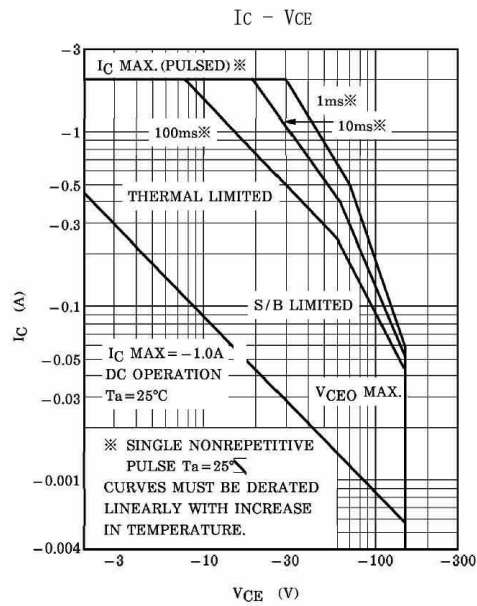
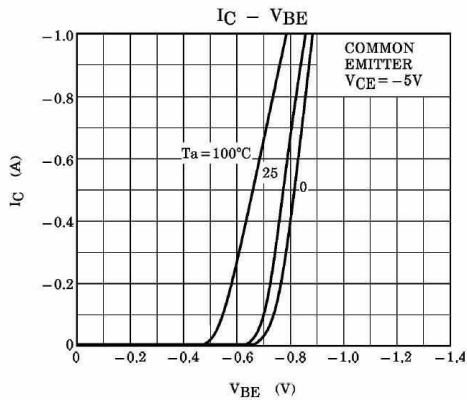
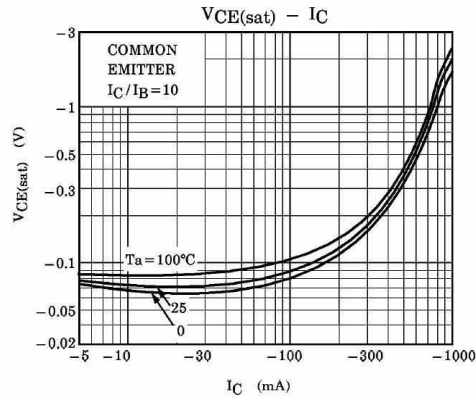
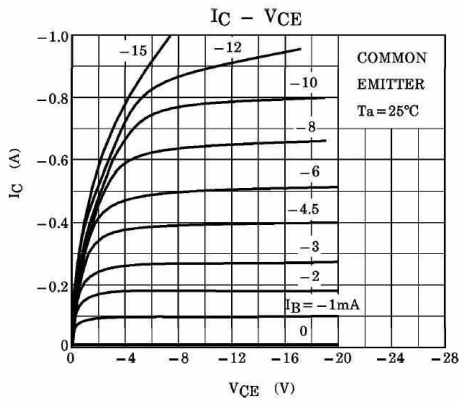
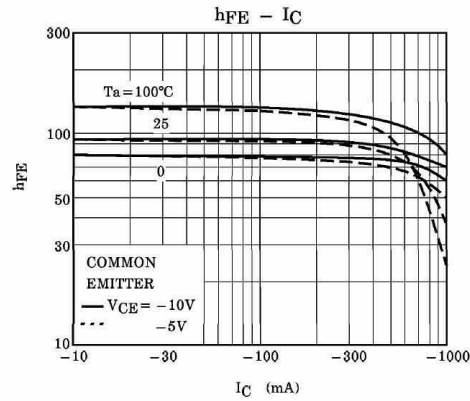
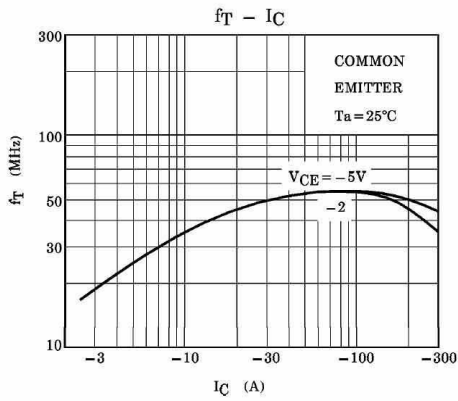
Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-160	V
Collector to Emitter Voltage	V_{CEO}	-160	V
Emitter to Base Voltage	V_{EBO}	-6.0	V
Collector Current-Continuous	I_C	-1.0	A
Collector Base-Continuous	I_B	-0.5	A
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

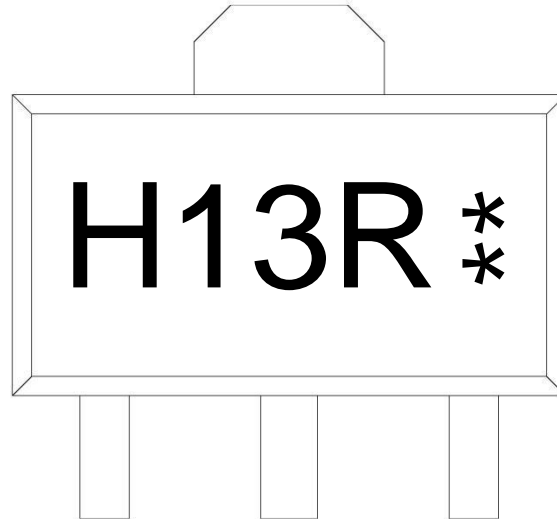
Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=-100\mu A$ $I_E=0$	-160			V
Collector to Emitter Voltage	V_{CEO}	$I_C=-500\mu A$ $I_B=0$	-160			V
Emitter to Base Voltage	V_{EBO}	$I_E=-100\mu A$ $I_C=0$	-6.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-150V$ $I_E=0$			-1.0	μA
Collector Cut-Off Current	I_{CEO}	$V_{CE}=-150V$ $I_B=0$			-10	μA
Emitter Base Cut-Off Current	I_{EBO}	$V_{EB}=-6.0V$ $I_C=0$			-1.0	μA
DC Current Gain	h_{FE}	$V_{CE}=-5.0V$ $I_C=-200mA$	60		320	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-500mA$ $I_B=-50mA$			-1.5	V
Base to Emitter Voltage	V_{BE}	$V_{CE}=-5.0V$ $I_C=-5.0mA$			-0.75	V
Transition Frequency	f_T	$V_{CE}=-5.0V$ $I_C=-200mA$	15	50		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-10V$ $f=1.0MHz$ $I_E=0$			35	pF

Electrical Characteristic Curve



Marking Instructions



Note:

- H: Company Code
- 13: Product Type
- R: h_{FE} Classifications Symbol
- ** : Lot No. Code, code change with Lot No

h_{FE} Classifications Symbol	R	O	Y
h_{FE} Range	60~120	100~200	160~320
Marking	H13R	H13O	H13Y

Packaging SPEC.

REEL INFORMATION

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOT-89	1,000	7	7,000	8	56,000	7" x12	180x120x180	385x257x392

Package Outline Dimensions

SOT-89

单位: mm

