

Description

Silicon PNP transistor in a SOT-89 Plastic Package

Applications

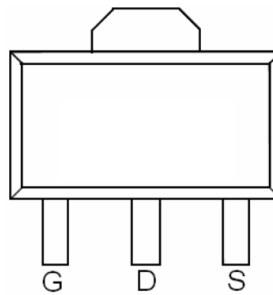
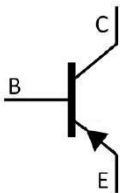
High voltage control circuit.

Features

- High voltage
- Low saturation voltage
- Low collector output capacitance
- Complementary pair with MMBTA42T
- Halogen-free product

Symbol	Parameter	Max	Unit
V_{CE0}	collector-emitter voltage	-300	V
I_c	collector current (DC)	-500	mA

Equivalent Circuit & Pinning



SOT-89 top view

PIN1: Base

PIN 2: Collector

PIN 3: Emitter

hFE Classifications & Marking

Marking	H2D
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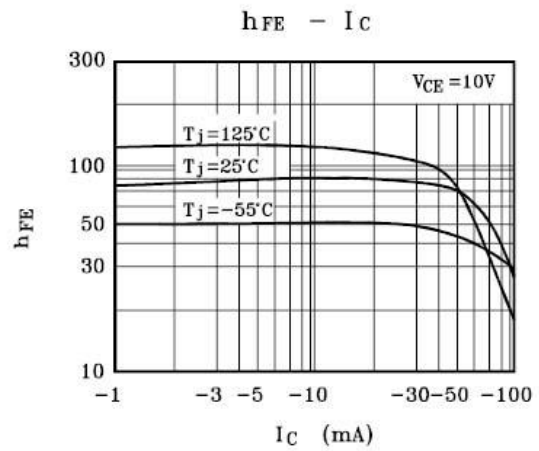
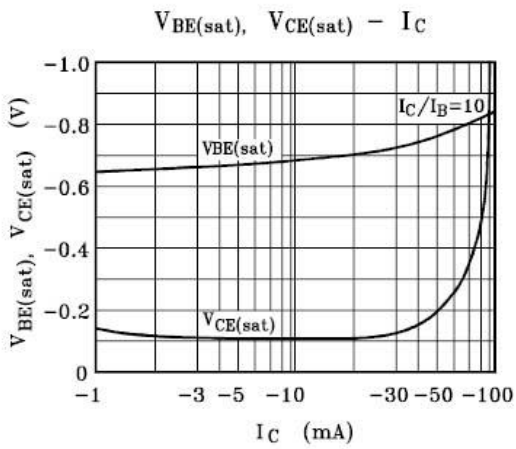
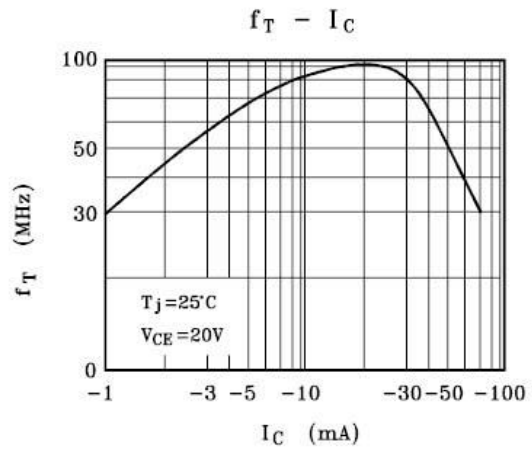
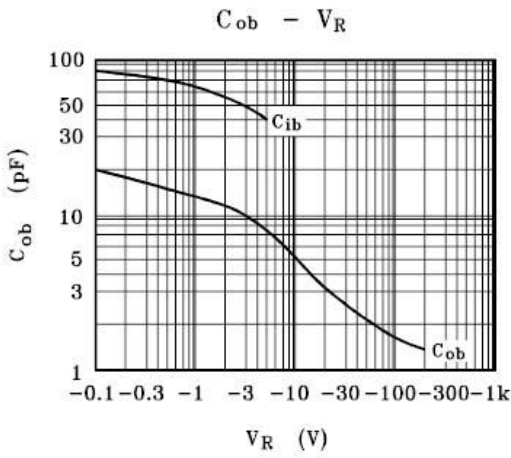
Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CB0}	-300	V
Collector to Emitter Voltage	V_{CEO}	-300	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-500	mA
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

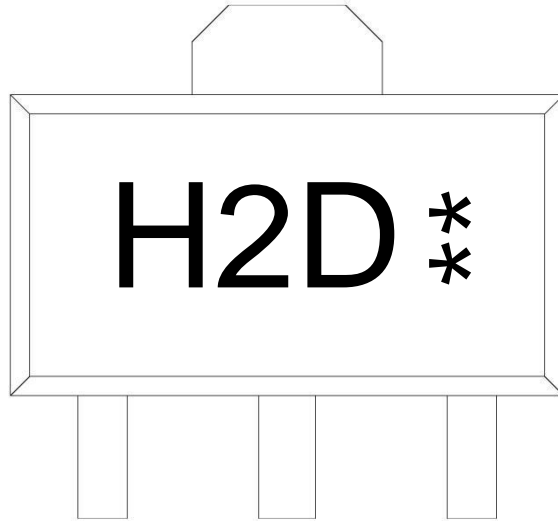
Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CB0}	$I_C=-100\mu A$ $I_E=0$	-300			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-1.0mA$ $I_B=0$	-300			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=-100\mu A$ $I_C=0$	-5.0			V
Collector Cut-Off Current	I_{CB0}	$V_{CB}=-200V$ $I_E=0$			-0.25	μA
Emitter Base Cut-Off Current	I_{EBO}	$V_{BE}=-3.0V$ $I_C=0$			-0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-10V$ $I_C=-10mA$	40			
	$h_{FE(2)}$	$V_{CE}=-10V$ $I_C=-30mA$	25			
	$h_{FE(3)}$	$V_{CE}=-10V$ $I_C=-1.0mA$	25			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-20mA$ $I_B=-2.0mA$			-0.5	V
Emitter to Base Saturation Voltage	$V_{BE(sat)}$	$I_C=-20mA$ $I_B=-2.0mA$			-0.9	V
Transition Frequency	f_T	$V_{CE}=-20V$ $f=100MHz$ $I_C=-10mA$	50			MHz
Collector-Base Capacitance	C_{cb}	$V_{CB}=-20V$ $f=1.0MHz$ $I_E=0$			6.0	pF

Electrical Characteristic Curve



Marking Instructions



Note:

H: Company Code

2D: Product Type

** : Lot No. Code, code change with Lot No

Marking	H2D
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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" ×12	180×120×180	385×257×392

Package Outline Dimensions

SOT-89

单位: mm

