

# 2SC2611

Silicon NPN Triple Diffused

# HITACHI

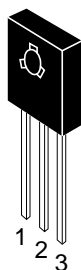
ADE-208-884 (Z)  
1st. Edition  
Sep. 2000

## Application

High voltage amplifier TV VIDEO output

## Outline

TO-126 MOD



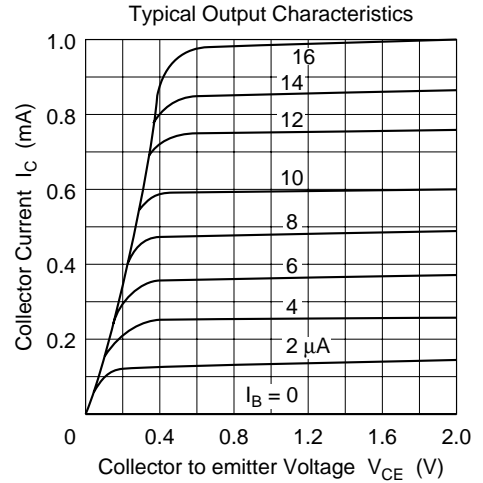
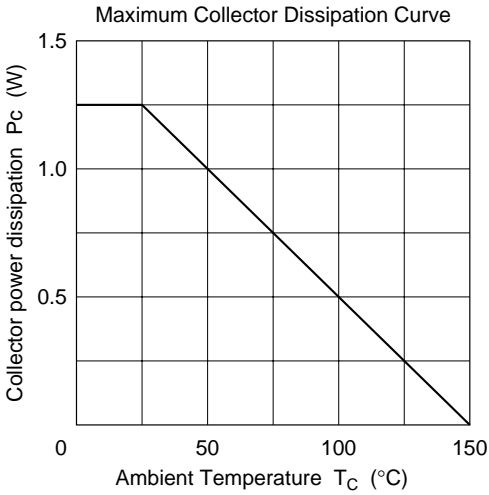
1. Emitter  
2. Collector  
3. Base

## Absolute Maximum Ratings (T<sub>a</sub> = 25°C)

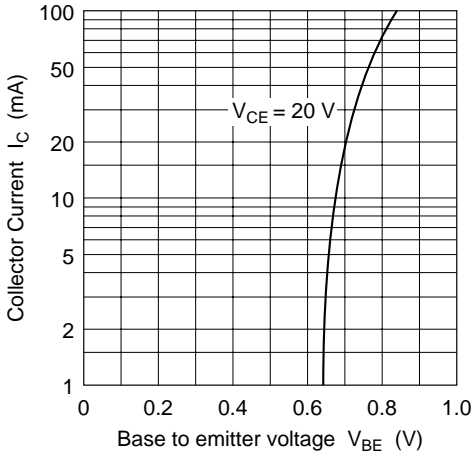
Item	Symbol	Ratings	Unit
Collector to base voltage	V <sub>CBO</sub>	300	V
Collector to emitter voltage	V <sub>CEO</sub>	300	V
Emitter to base voltage	V <sub>EBO</sub>	5	V
Collector current	I <sub>C</sub>	100	mA
Collector power dissipation	P <sub>C</sub>	1.25	W
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

## Electrical Characteristics (Ta = 25°C)

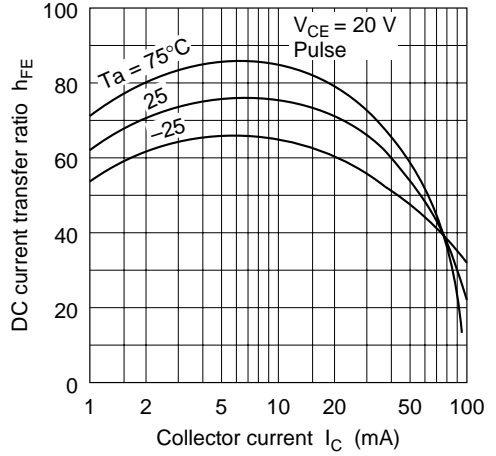
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	300	—	—	V	$I_C = 10 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	300	—	—	V	$I_C = 1 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	5	—	—	V	$I_E = 10 \mu A, I_C = 0$
Collector cutoff current	$I_{CEO}$	—	—	1.0	$\mu A$	$V_{CE} = 250 \text{ V}, R_{BE} = \infty$
DC current transfer ratio	$h_{FE}$	30	—	200		$V_{CE} = 20 \text{ V}, I_C = 20 \text{ mA}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	1.5	V	$I_C = 20 \text{ mA}, I_B = 2 \text{ mA}$
Gain bandwidth product	$f_T$	50	80	—	MHz	$V_{CE} = 20 \text{ V}, I_C = 20 \text{ mA}$
Collector output capacitance	$C_{ob}$	—	—	4.0	pF	$V_{CB} = 20 \text{ V}, I_E = 0, f = 1 \text{ MHz}$



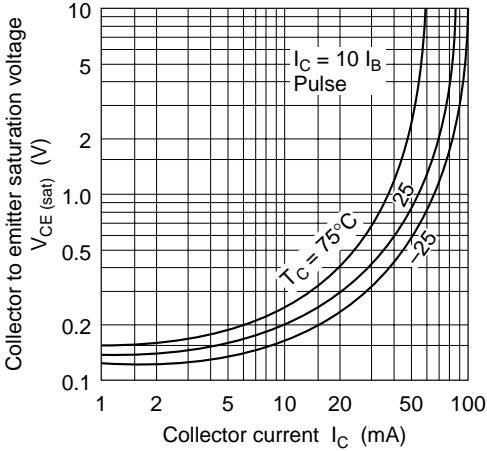
Typical Transfer Characteristics



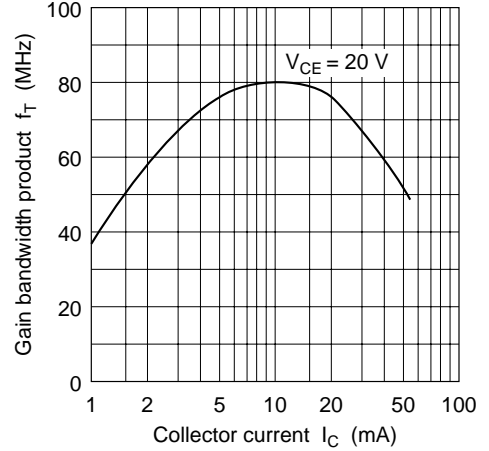
DC Current Transfer Ratio vs. Collector Current



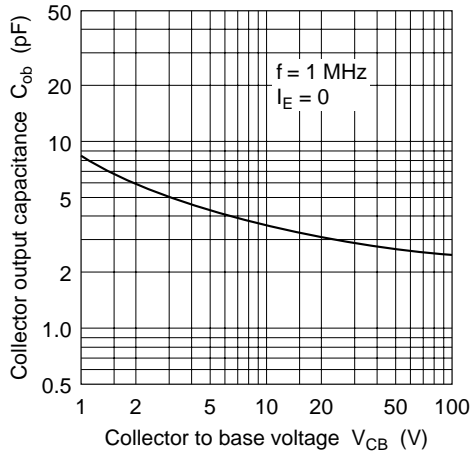
Collector to Emitter Saturation Voltage vs. Collector Current



Gain Bandwidth Product vs. Collector Current

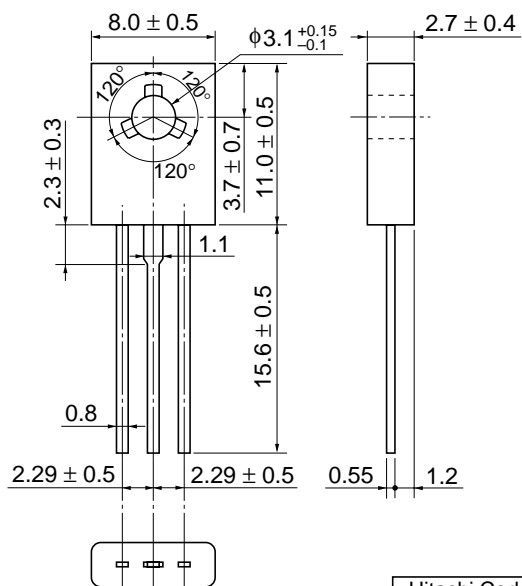


Collector Output Capacitance vs.  
Collector to Base Voltage



## Package Dimensions

Unit: mm



Hitachi Code	TO-126 Mod
JEDEC	—
EIAJ	—
Mass (reference value)	0.67 g

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