

2SC2611

Silicon NPN Triple Diffused

HITACHI

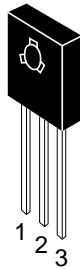
ADE-208-884 (Z)
1st. Edition
Sep. 2000

Application

High voltage amplifier TV VIDEO output

Outline

TO-126 MOD



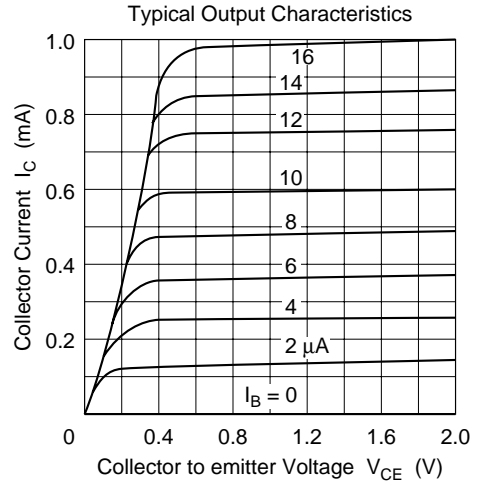
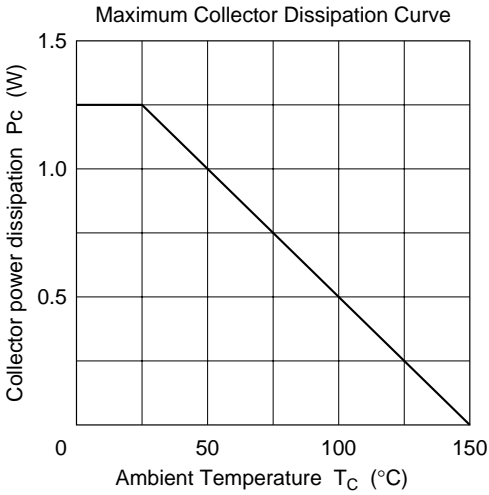
1. Emitter
2. Collector
3. Base

Absolute Maximum Ratings (Ta = 25°C)

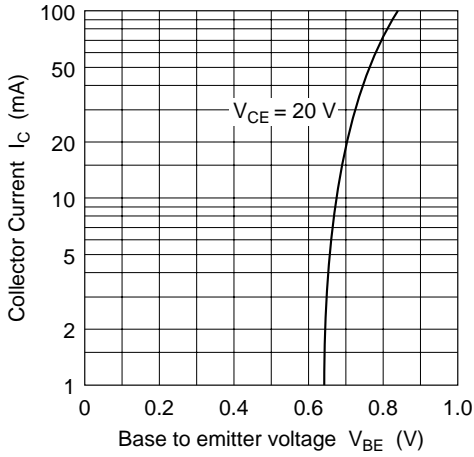
Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	300	V
Collector to emitter voltage	V_{CEO}	300	V
Emitter to base voltage	V_{EBO}	5	V
Collector current	I_C	100	mA
Collector power dissipation	P_C	1.25	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

Electrical Characteristics (Ta = 25°C)

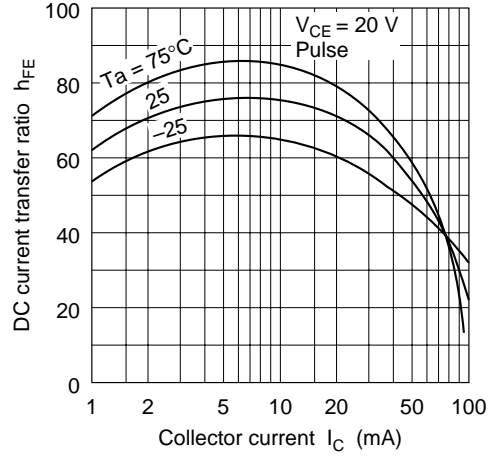
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	300	—	—	V	$I_C = 10 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	300	—	—	V	$I_C = 1 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	5	—	—	V	$I_E = 10 \mu A, I_C = 0$
Collector cutoff current	I_{CEO}	—	—	1.0	μA	$V_{CE} = 250 \text{ V}, R_{BE} = \infty$
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	$V_{CB} = 20 \text{ V}, I_E = 0, f = 1 \text{ MHz}$



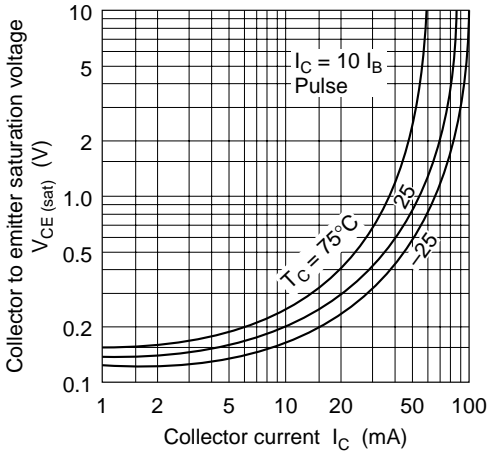
Typical Transfer Characteristics



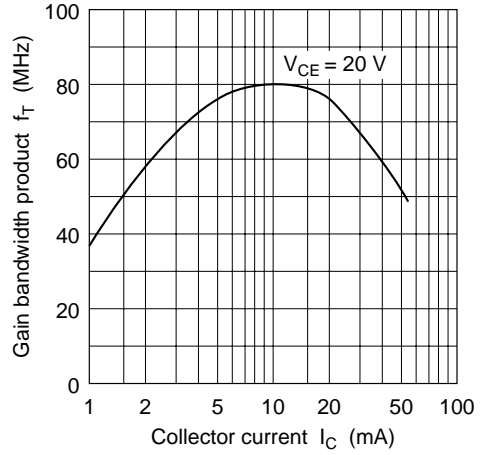
DC Current Transfer Ratio vs. Collector Current



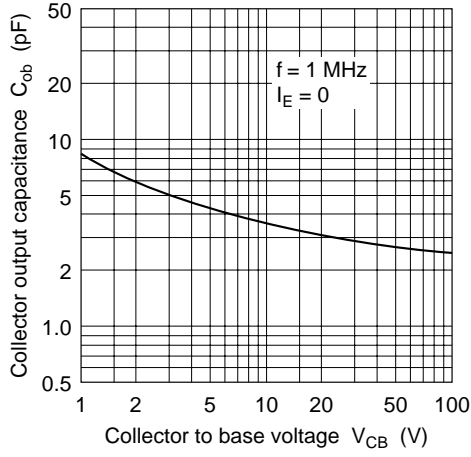
Collector to Emitter Saturation Voltage vs. Collector Current



Gain Bandwidth Product vs. Collector Current

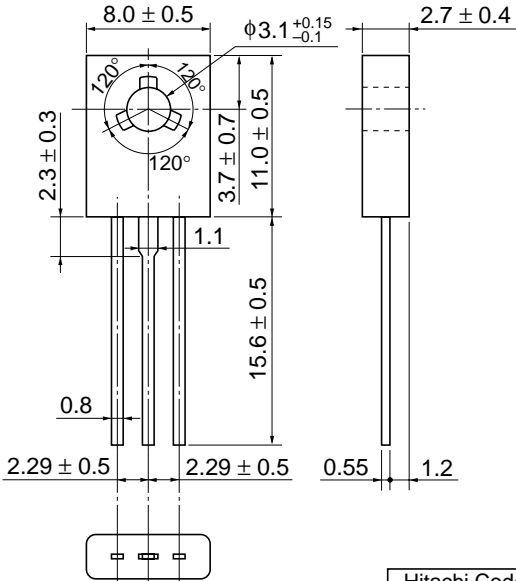


Collector Output Capacitance vs.
Collector to Base Voltage



Package Dimensions

Unit: mm



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

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