
2SC4647

Silicon NPN Triple Diffused

HITACHI

Application

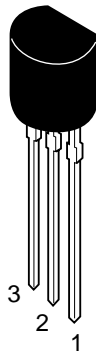
High voltage amplifier

Features

- High break down voltage
 $V_{(BR)CEO} = 300 \text{ V min.}$

Outline

TO-92 (1)



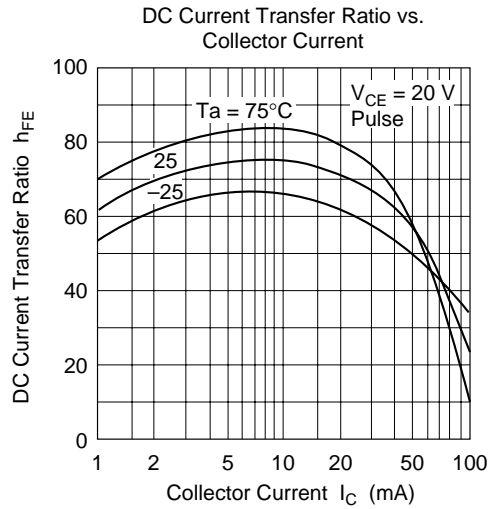
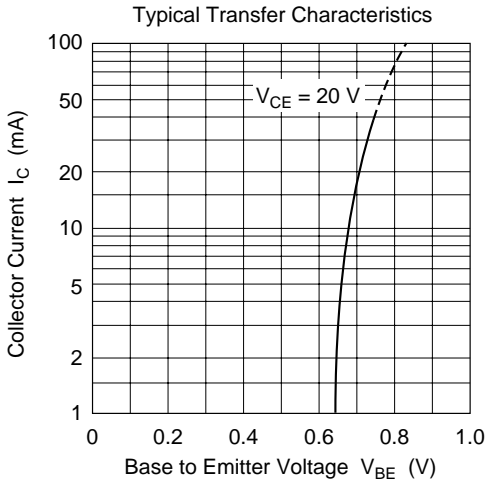
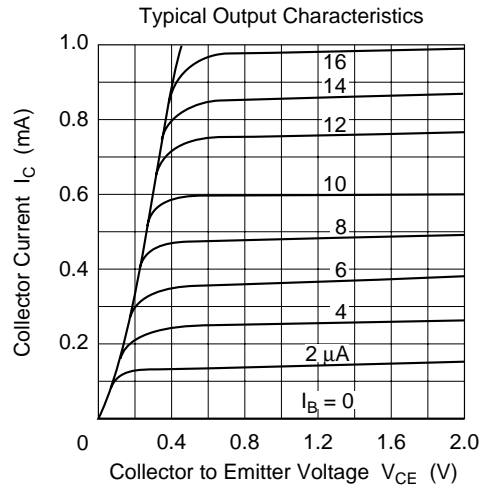
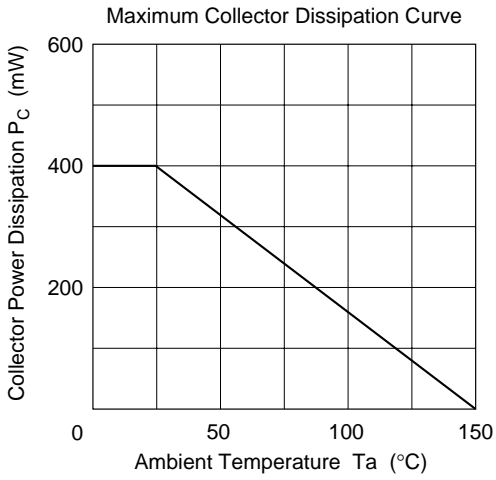
1. Emitter
2. Collector
3. Base

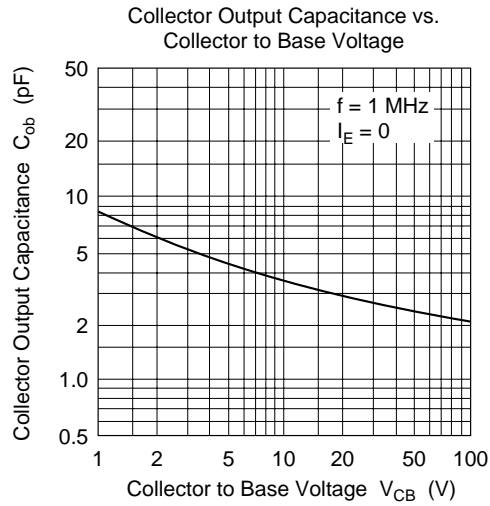
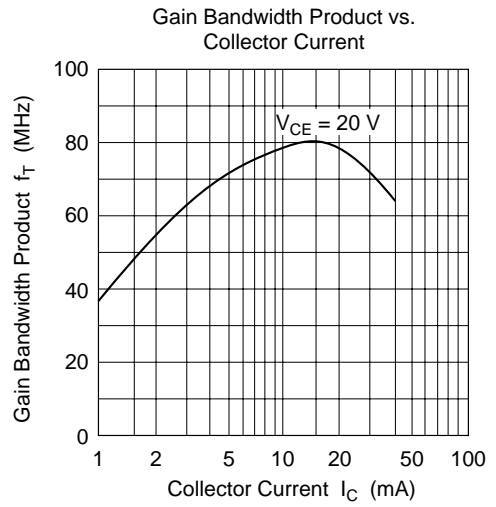
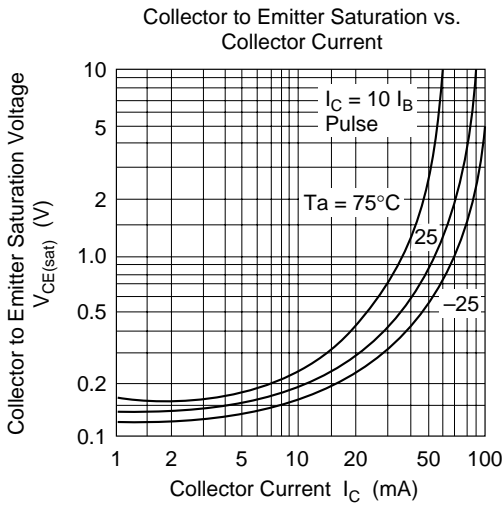
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

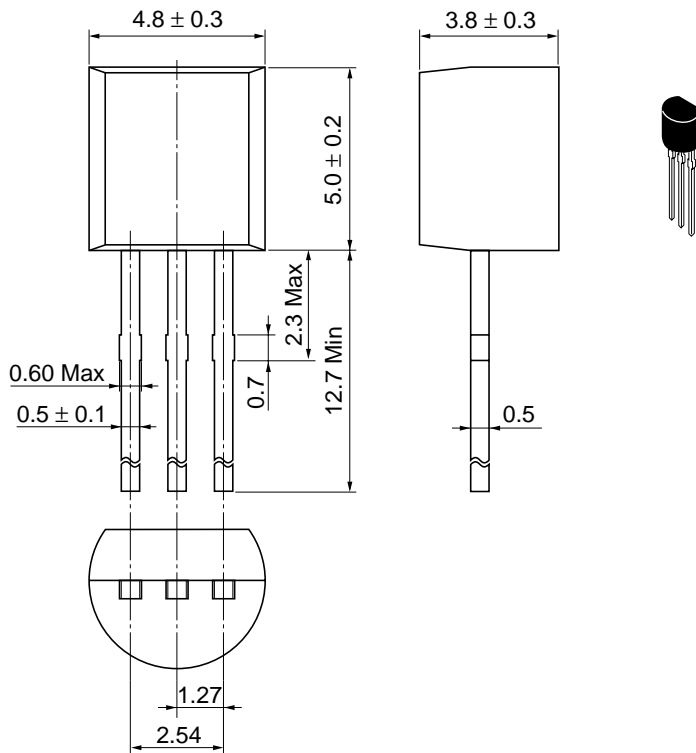
Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	300	V
Collector to emitter voltage	V_{CEO}	300	V
Emitter to base voltage	V_{EBO}	5	V
Collector current	I_{C}	100	mA
Collector power dissipation	P_{C}	400	mW
Junction temperature	T_{j}	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

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







Hitachi Code	TO-92 (1)
JEDEC	Conforms
EIAJ	Conforms
Weight (reference value)	0.25 g

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