

# 2SD655

Silicon NPN Epitaxial

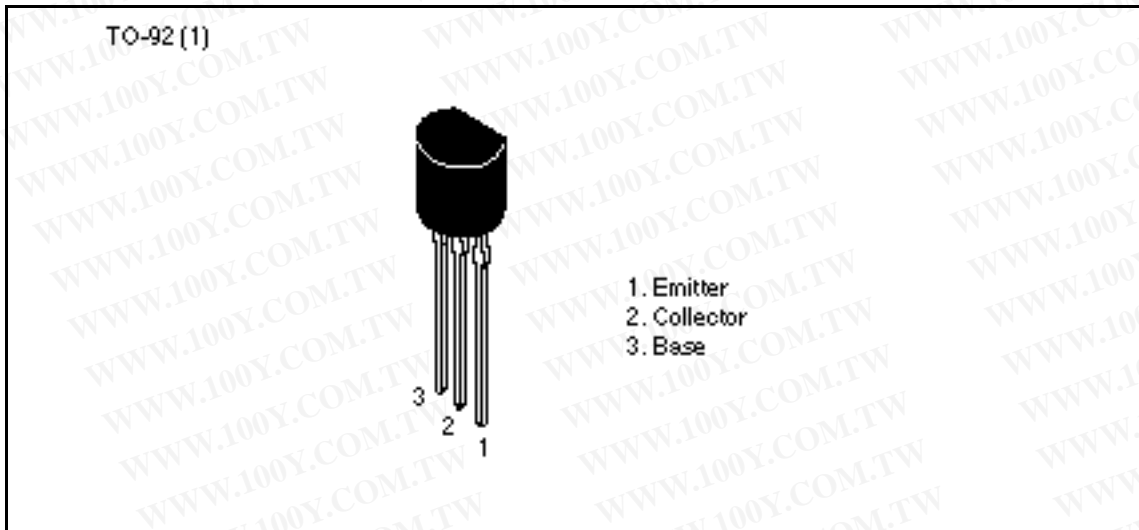
# HITACHI

## Application

Low frequency power amplifier, Muting

## Outline

勝特力材料 886-3-5753170  
勝特力电子(上海) 86-21-54151736  
勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)



## Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	30	V
Collector to emitter voltage	$V_{CEO}$	15	V
Emitter to base voltage	$V_{EBO}$	5	V
Collector current	$I_C$	0.7	A
Collector peak current	$i_{C(peak)}$	1.0	A
Collector power dissipation	$P_C$	500	mW
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

## 2SD655

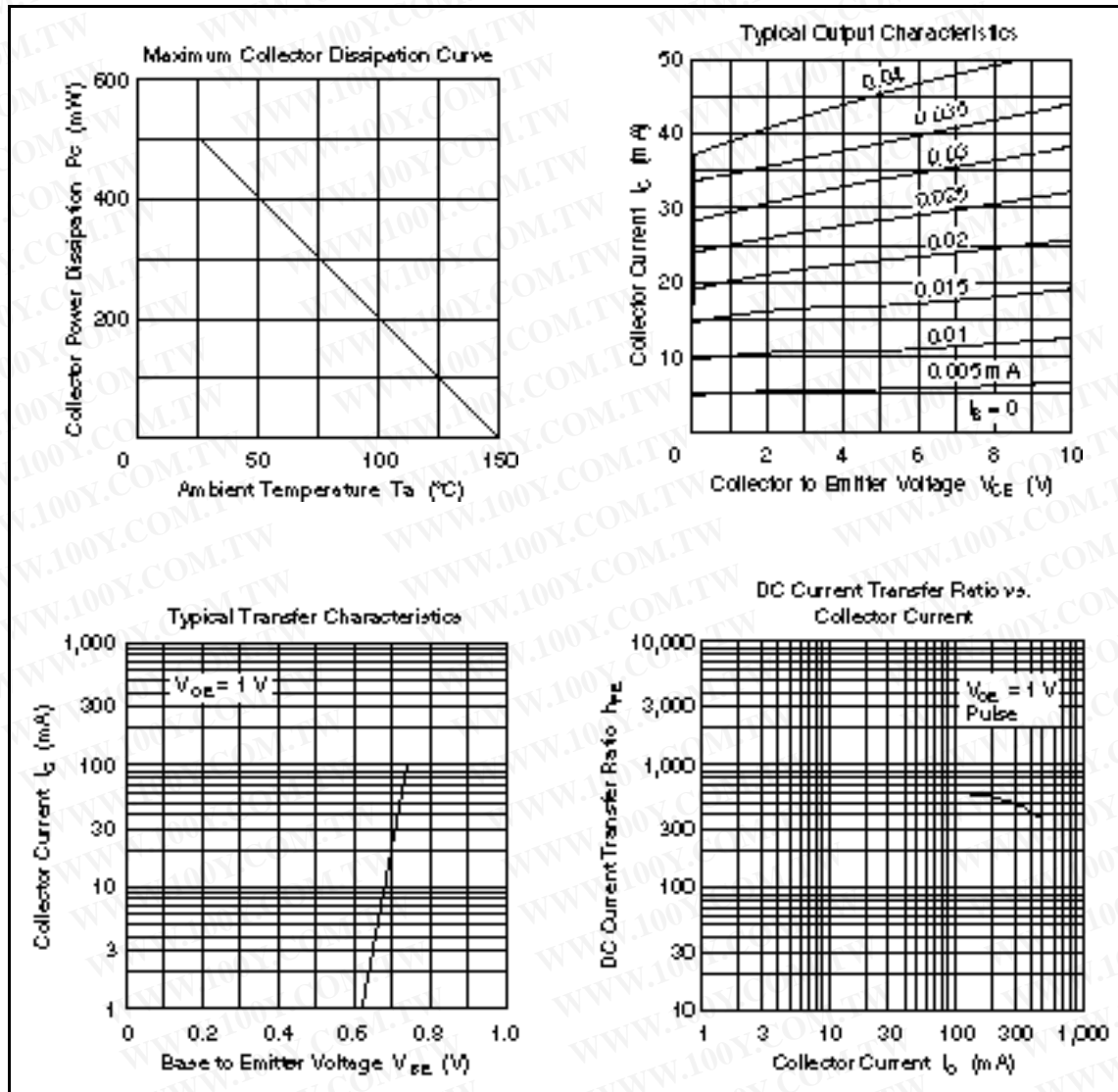
### Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	30	—	—	V	$I_C = 10 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	15	—	—	V	$I_C = 1 mA, R_{BE} =$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	5	—	—	V	$I_E = 10 \mu A, I_C = 0$
Collector cutoff current	$I_{CBO}$	—	—	1.0	$\mu A$	$V_{CB} = 20 V, I_E = 0$
Base to emitter voltage	$V_{BE}$	—	—	1.0	V	$V_{CE} = 1 V, I_C = 150 mA$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	0.15	0.5	V	$I_C = 500 mA, I_B = 50 mA^{*2}$
DC current transfer ratio	$h_{FE}^{*1}$	250	—	1200		$V_{CE} = 1 V, I_C = 150 mA^{*2}$
Gain bandwidth product	$f_T$	—	250	—	MHz	$V_{CE} = 1 V, I_C = 150 mA$

Notes: 1. The 2SD655 is grouped by  $h_{FE}$  as follows.

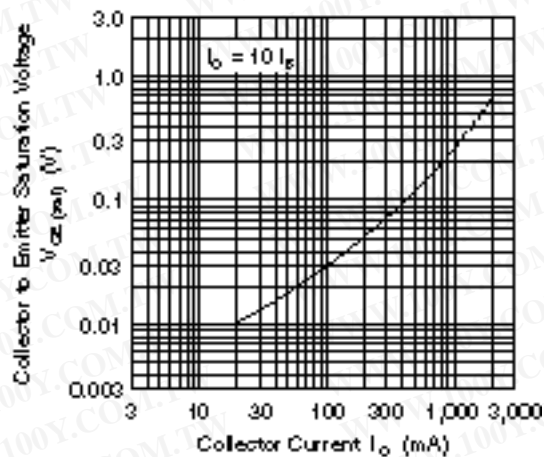
2. Pulse test

D	E	F
250 to 500	400 to 800	600 to 1200

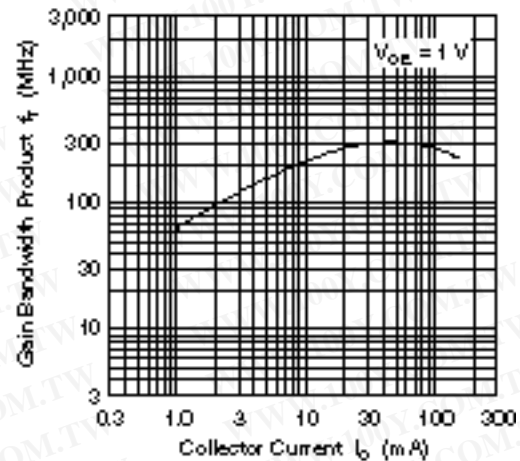


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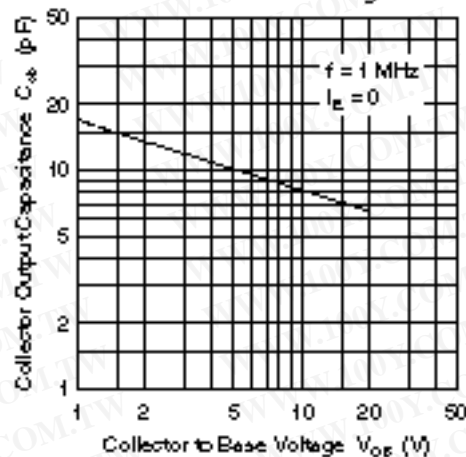
Collector to Emitter Saturation Voltage vs. Collector Current



Gain Bandwidth Product vs. Collector Current



Collector Output Capacitance vs. Collector to Base Voltage



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