

## C1815LT1 TRANSISTOR (NPN)

### FEATURES

Power dissipation

$$P_{CM}: 0.2 \text{ W (Tamb=25)}$$

Collector current

$$I_{CM}: 0.15 \text{ A}$$

Collector-base voltage

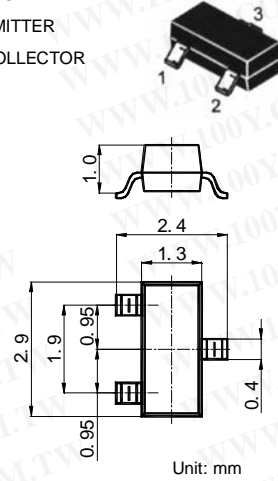
$$V_{(BR)CBO}: 60 \text{ V}$$

Operating and storage junction temperature range

$$T_J, T_{stg}: -55 \text{ to } +150$$

### SOT-23

1. BASE
2. EMITTER
3. COLLECTOR



### ELECTRICAL CHARACTERISTICS (Tamb=25 unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100\mu A, I_E = 0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 0.1mA, I_B = 0$	50			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = 60V, I_E = 0$			0.1	$\mu A$
Collector cut-off current	$I_{CEO}$	$V_{CE} = 50V, I_B = 0$			0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 5V, I_C = 0$			0.1	$\mu A$
DC current gain	$h_{FE(1)}$	$V_{CE} = 6V, I_C = 2mA$	130		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100mA, I_B = 10mA$			0.25	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 100mA, I_B = 10mA$			1	V
Transition frequency	$f_T$	$V_{CE} = 10V, I_C = 1mA$ $f = 30MHz$	80			MHz

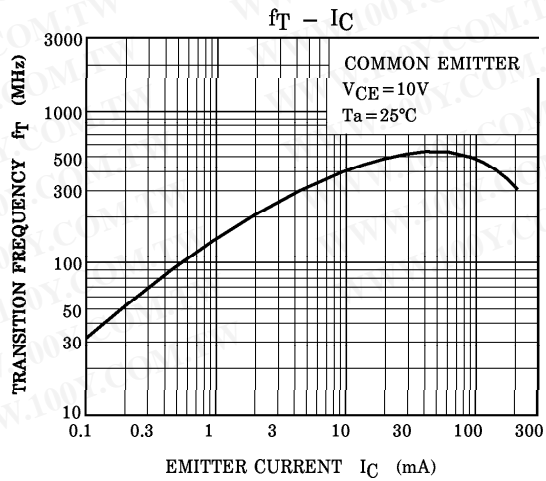
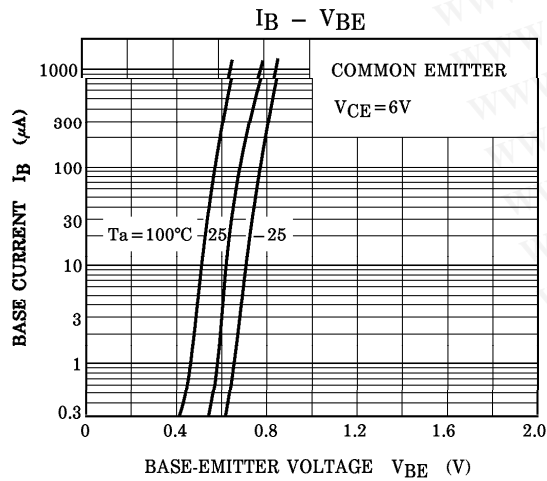
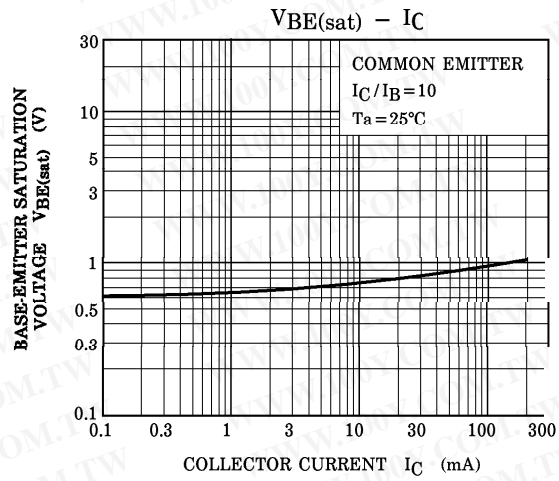
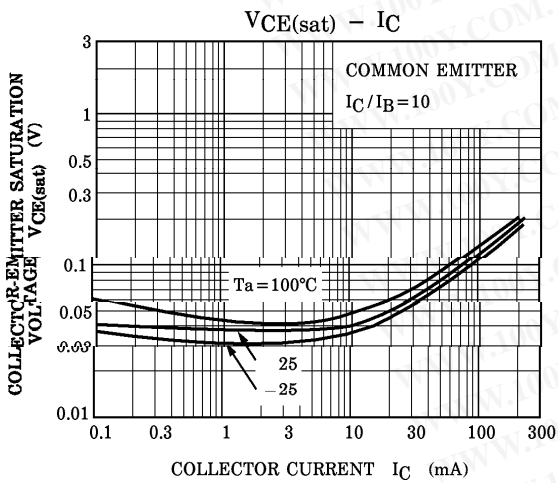
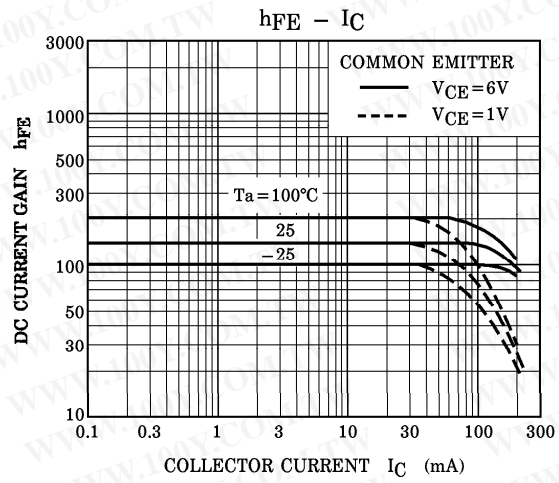
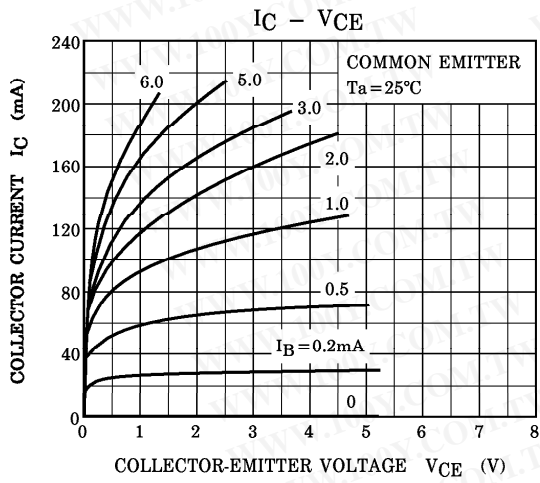
### CLASSIFICATION OF $h_{FE(1)}$

Rank	L	H
Range	130-200	200-400

DEVICE MARKING	C1815LT1=HF
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# C1815LT1

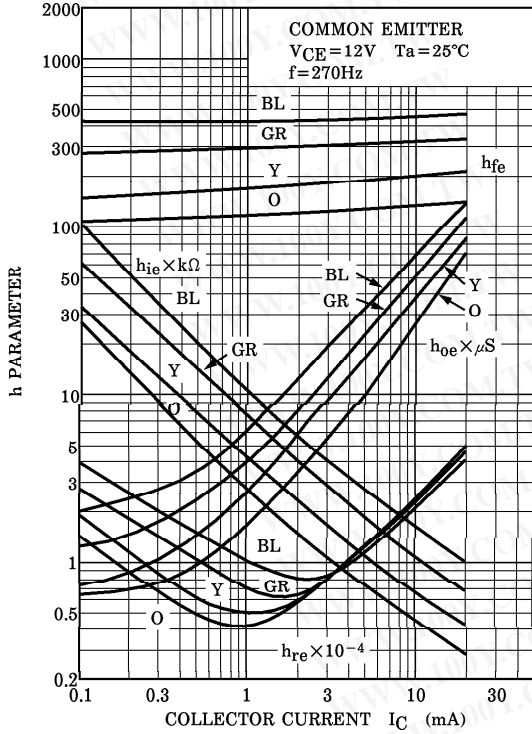
勝特力材料 886-3-5753170  
勝特力电子(上海) 86-21-54151736  
勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)



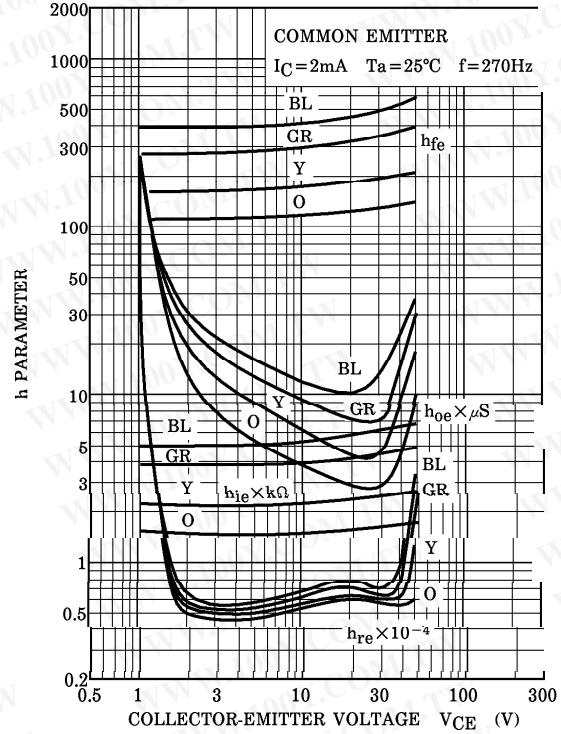
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h PARAMETER -  $I_C$



h PARAMETER -  $V_{CE}$



$P_C - T_a$

