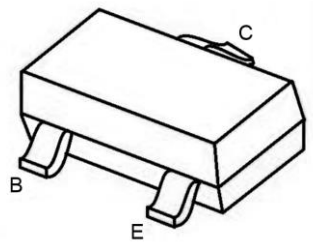
SOT-23



2SC2715 Transistor(NPN)

Feature

- High Power Gain
- Recommended for FM IF,OSC Stage and AM CONV. IF Stage.

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	35	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	4	V
Collector Current -Continuous	I_C	50	mA
Power Dissipation	P_d	0.35	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	357	℃/W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	-55~ +150	℃

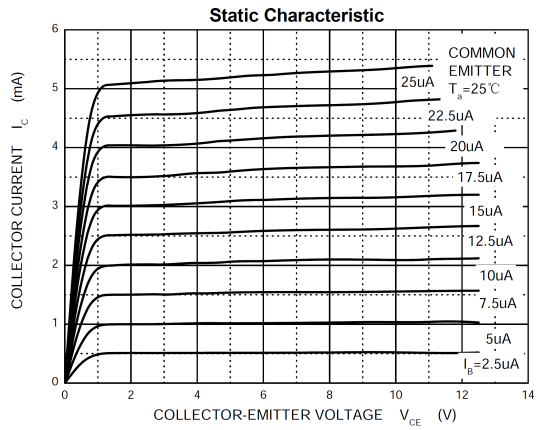
ELECTRICAL CHARACTERISTICS(T_a=25℃ unless otherwise noted)

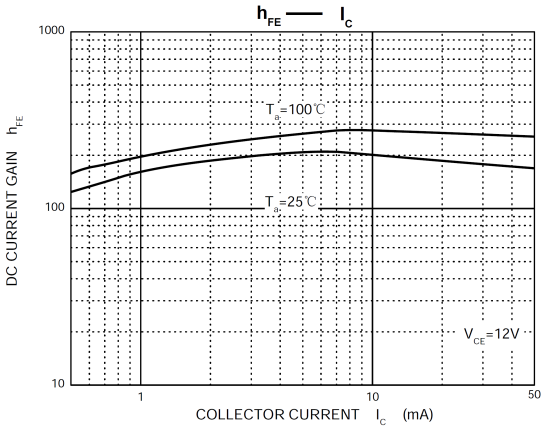
Parameter	Symbol	Test Condition	Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=10μA ,I_E=0	35		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA , I_B=0	30		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=10μA,I_C=0	4		V
Collector cut-off current	I_{CBO}	V_{CB}=35V, I_E=0		100	nA
Emitter cut-off current	I_{EBO}	V_{EB}=4V, I_C=0		100	nA
DC current gain	h_{FE}	V_{CE}=12V, I_C=2mA	40	240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=10mA, I_B=1mA		0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=10mA, I_B=1mA		1	V
Transition frequency	f_T	V_{CE}= 10V, I_C=1mA,	100	400	MHz
Collector output capacitance	C_{ob}	V_{CB}= 10V, I_E=1mA, f=1MHz		3.2	pf
Storage Time	Gpe	V_{CE}= 6V, I_C=1mA, f=10.7MHz	27	33	dB

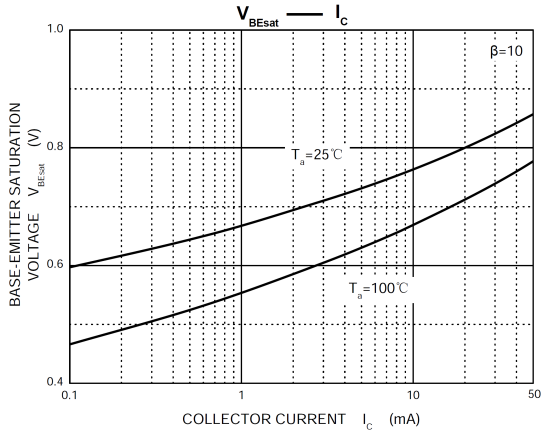
CLASSIFICATION OF h_{FE}

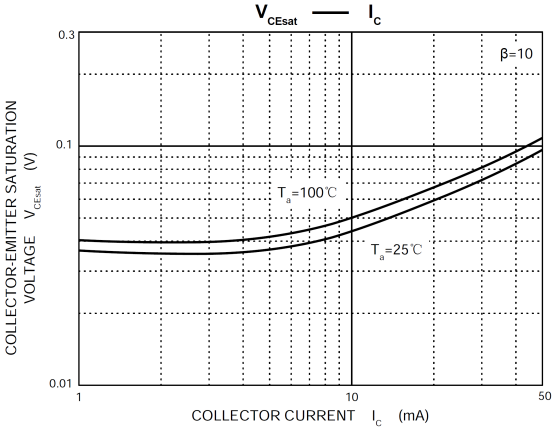
Rank	R	O	Y
Range	**40-80**	**70-140**	**120-240**
Marking	**RR1**	**RO1**	**RY1**

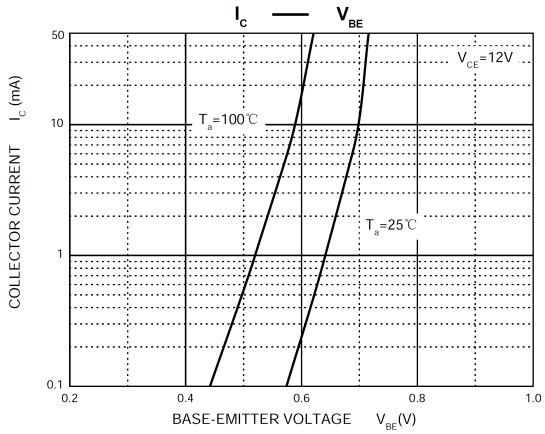
Typical Characteristics

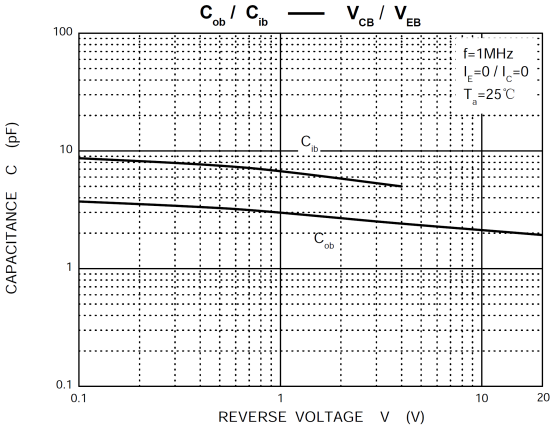


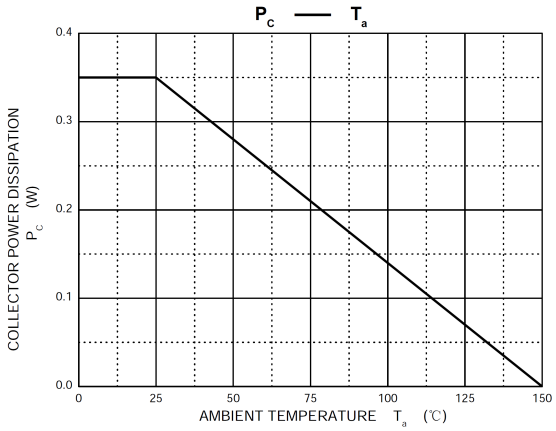




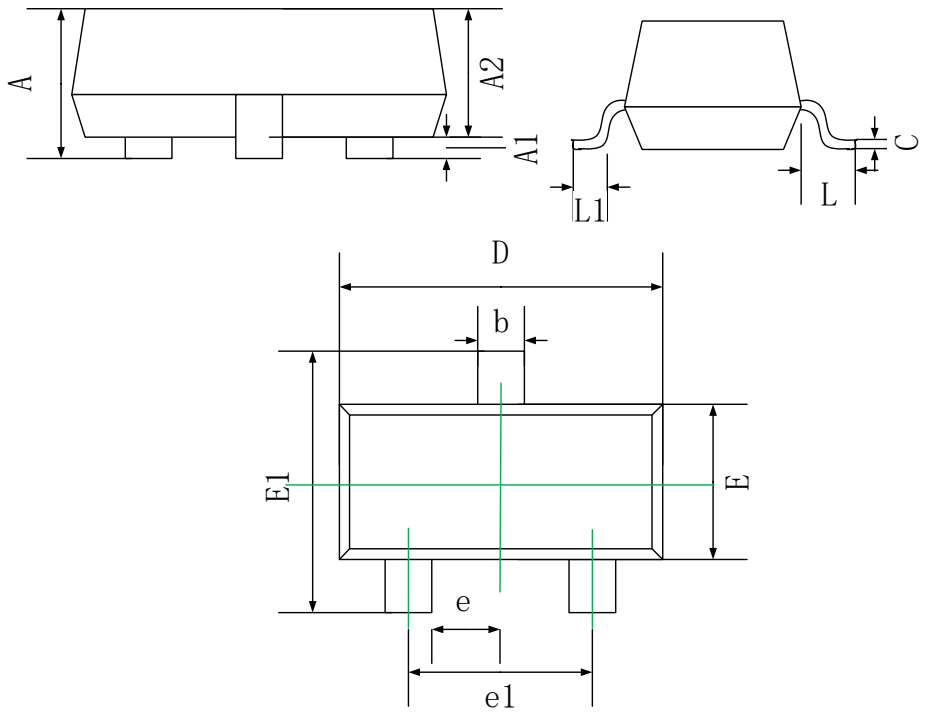






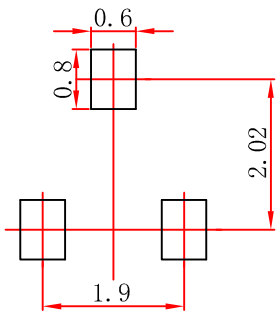


SOT-23 Package Information



Symbol	Dimensions In Millimeters	
	Min.	Max.
A	0.90	1.15
A1	0.00	0.10
A2	0.90	1.05
b	0.30	0.50
c	0.08	0.15
D	2.80	3.00
E	1.20	1.40
E1	2.25	2.55
e	0.95 REF.	
e1	1.80	2.00
L	0.55 REF.	
L1	0.30	0.50

SOT-23 Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.