

RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

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

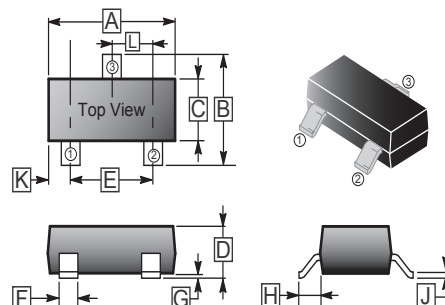
## CLASSIFICATION OF $h_{FE}$

Product-Rank	2SC2715-R	2SC2715-O	2SC2715-Y
Range	40~80	70~140	120~240
Marking	RR1	RO1	RY1

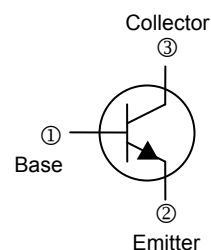
## PACKAGE INFORMATION

Package	MPQ	LeaderSize
SOT-23	3K	7' inch

## SOT-23



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.80	3.04	G	0.09	0.18
B	2.10	2.55	H	0.45	0.60
C	1.20	1.40	J	0.08	0.177
D	0.89	1.15	K	0.6 REF.	
E	1.78	2.04	L	0.89	1.02
F	0.30	0.50			



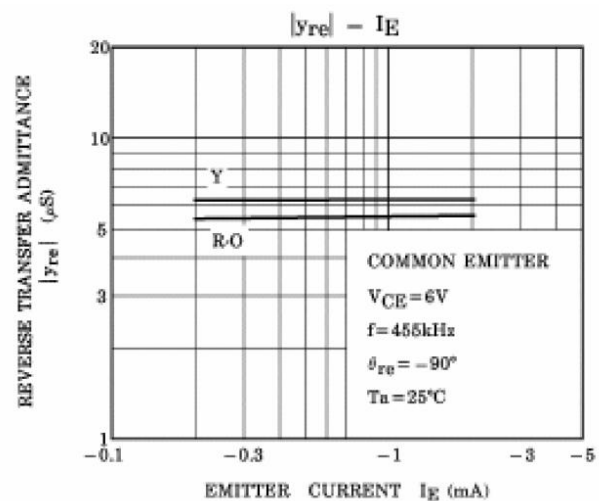
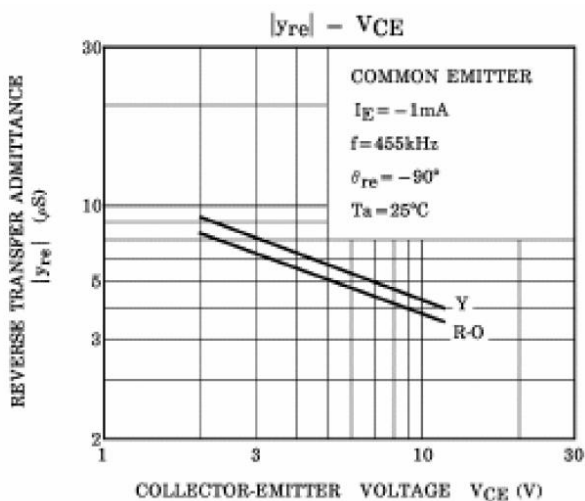
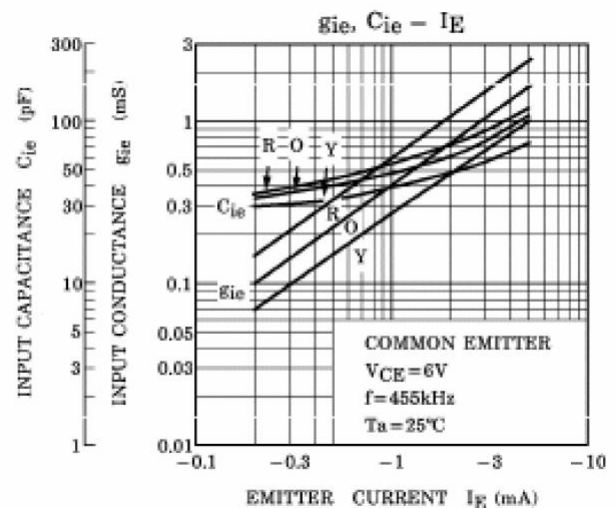
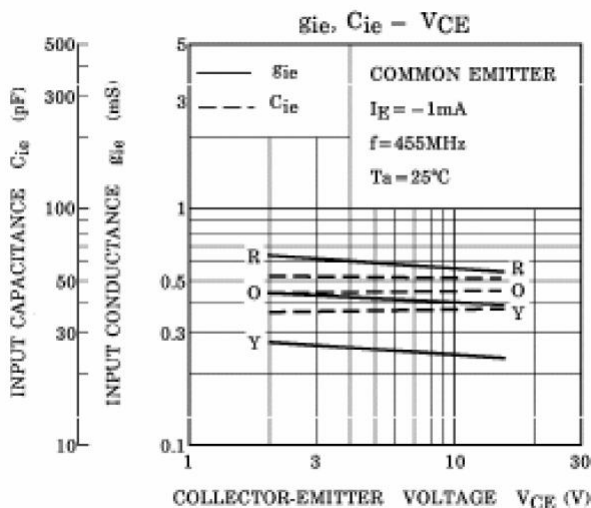
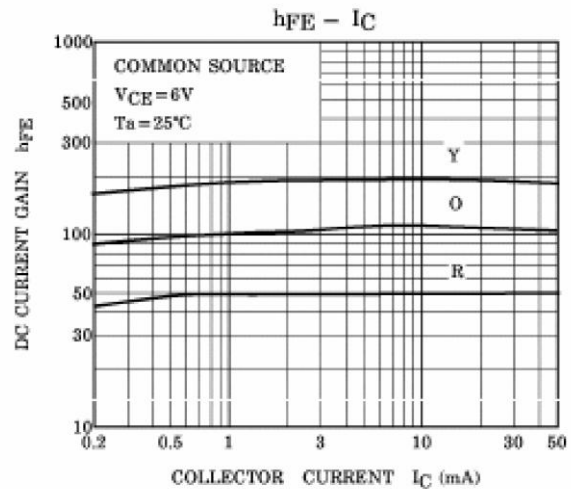
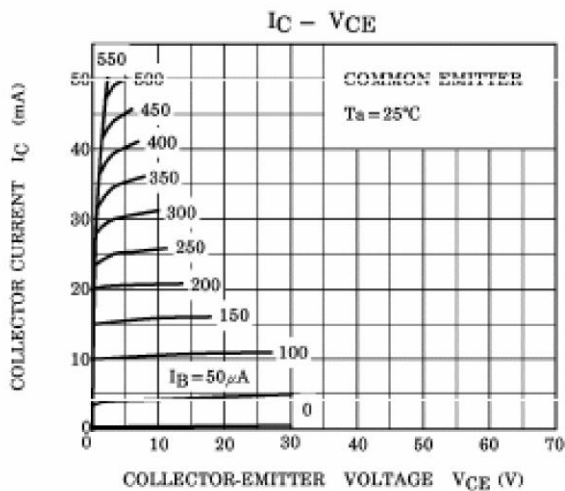
## ABSOLUTE MAXIMUM RATINGS ( $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	$V_{CB0}$	35	V
Collector to Emitter Voltage	$V_{CEO}$	30	V
Emitter to Base Voltage	$V_{EBO}$	4	V
Collector Current - Continuous	$I_C$	50	mA
Collector Power Dissipation	$P_C$	350	mW
Junction, Storage Temperature	$T_J, T_{STG}$	150, -55~150	$^\circ\text{C}$

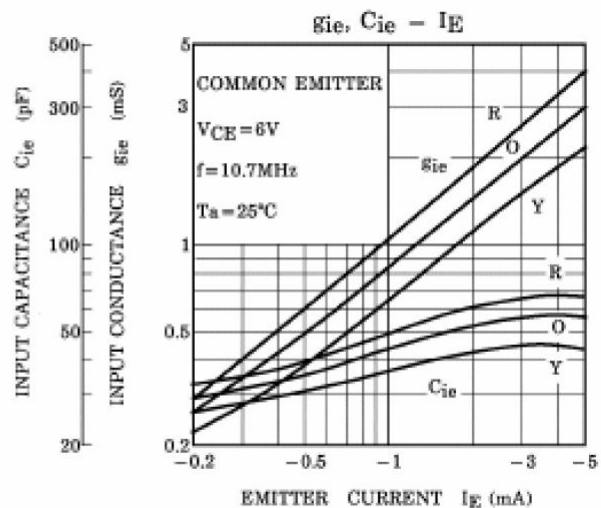
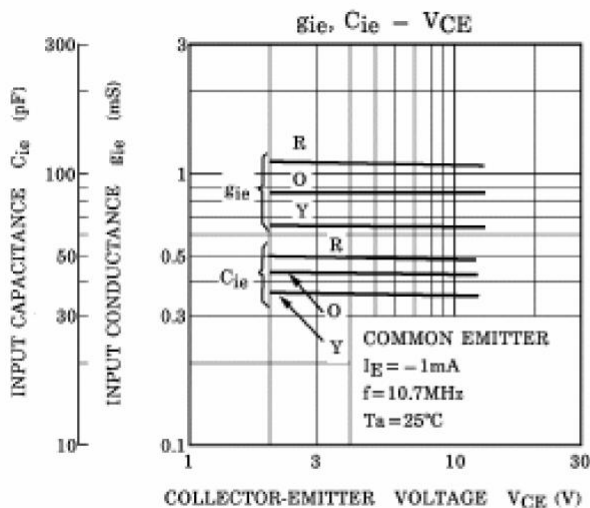
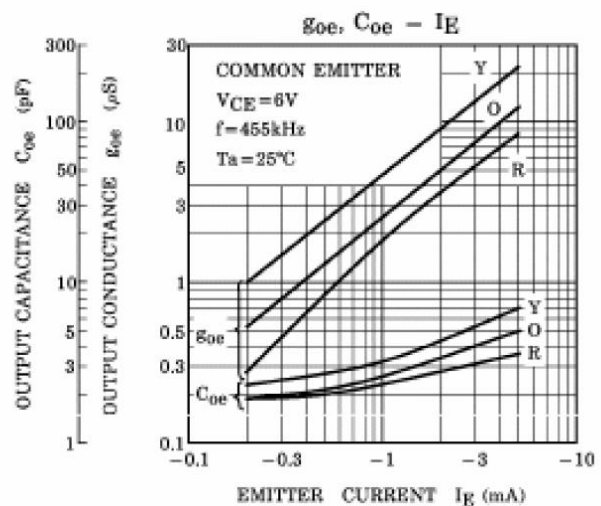
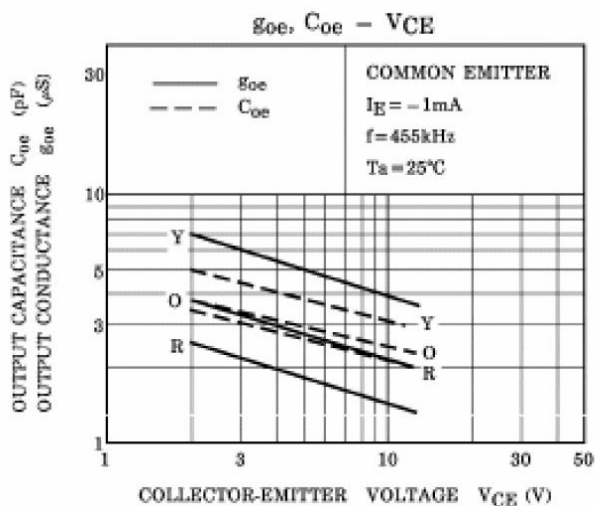
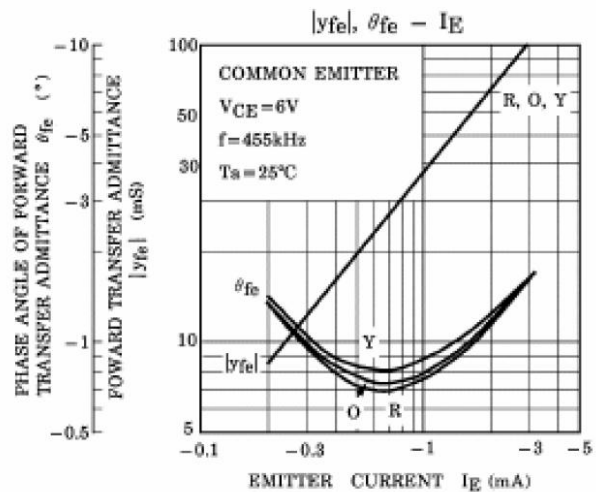
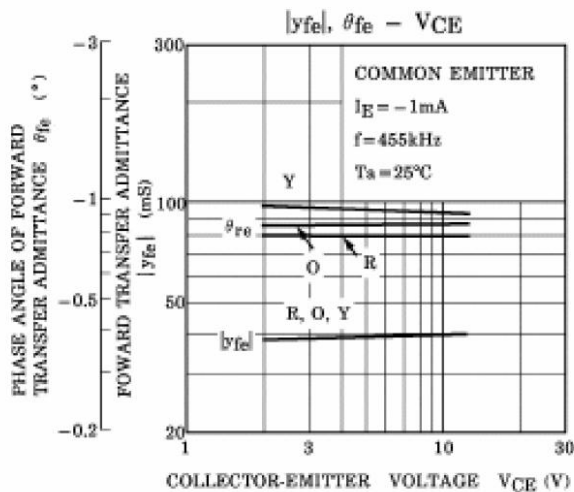
## ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Collector to Base Breakdown Voltage	$V_{(BR)CB0}$	35	-	-	V	$I_C=10\mu\text{A}, I_E=0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	30	-	-	V	$I_C=1\text{mA}, I_B=0$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	4	-	-	V	$I_E=10\mu\text{A}, I_C=0$
Collector Cut-Off Current	$I_{CBO}$	-	-	0.1	$\mu\text{A}$	$V_{CB}=35\text{V}, I_E=0$
Emitter Cut-Off Current	$I_{EBO}$	-	-	0.1	$\mu\text{A}$	$V_{EB}=4\text{V}, I_C=0$
DC Current Gain	$h_{FE}$	40	-	240		$V_{CE}=12\text{V}, I_C=2\text{mA}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.4	V	$I_C=10\text{mA}, I_B=1\text{mA}$
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	-	-	1	V	$I_C=10\text{mA}, I_B=1\text{mA}$
Transition Frequency	$f_T$	100	-	400	MHz	$V_{CE}=10\text{V}, I_C=1\text{mA}$
Power Gain	$G_{pe}$	27	-	33	dB	$V_{CE}=6\text{V}, I_C=1\text{mA}, f=10.7\text{MHz}$

**CHARACTERISTIC CURVES**



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