

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

FEATURES

- Small reverse Transfer Capacitance : $C_{re}=0.7\text{pF}(\text{typ.})$
- Low Noise Figure : $NF=2.5\text{dB}(\text{typ.})(f=100\text{MHz})$

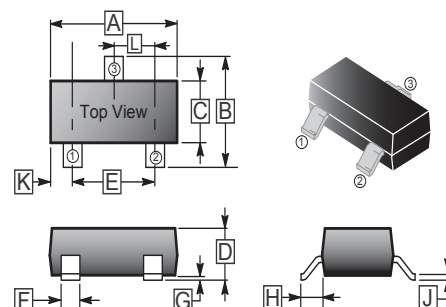
CLASSIFICATION OF h_{FE}

Product-Rank	2SC2714-R	2SC2714-O	2SC2714-Y
Range	40~80	70~140	100~200
Marking	QR	QO	QY

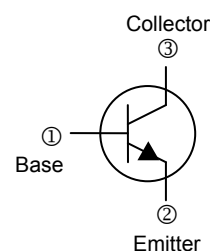
PACKAGE INFORMATION

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			



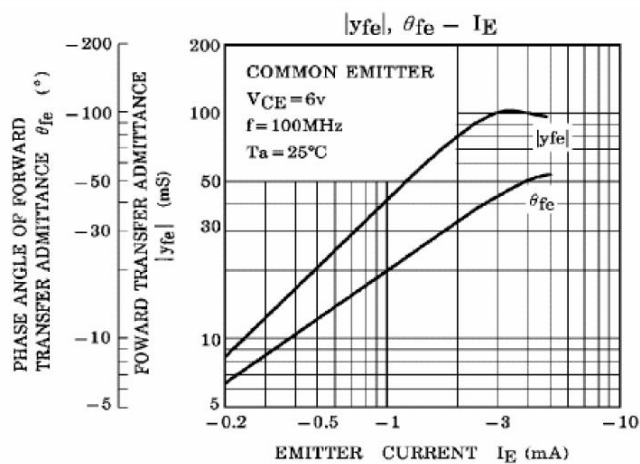
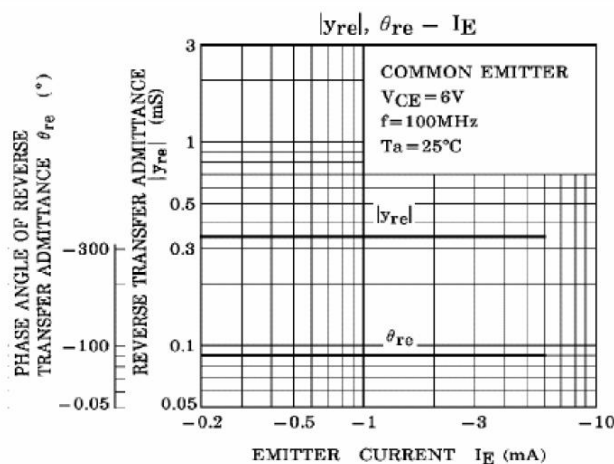
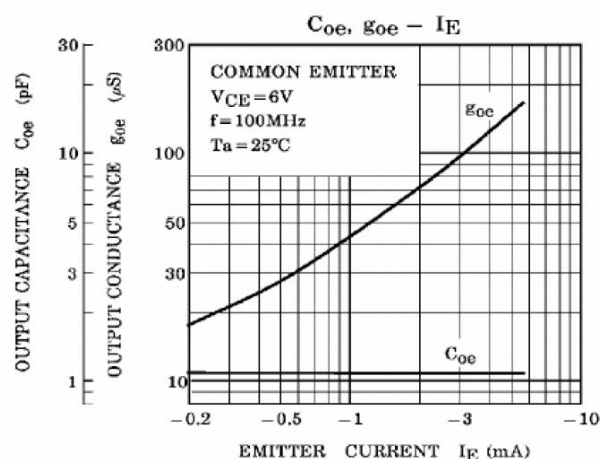
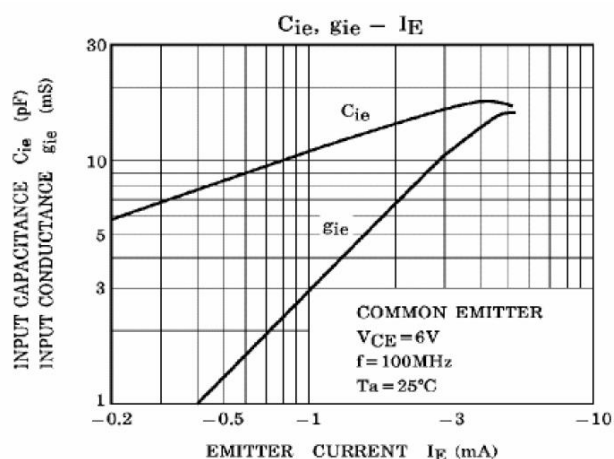
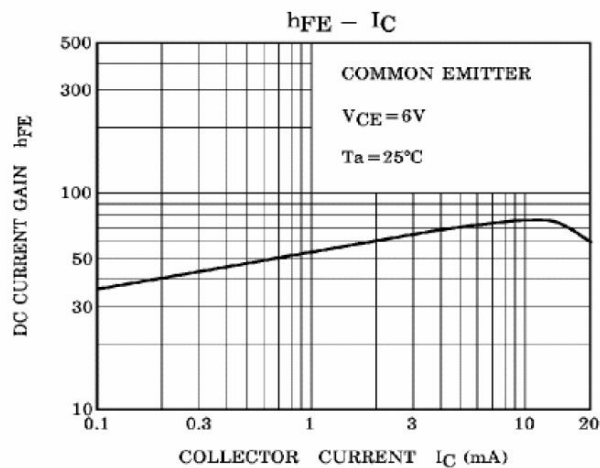
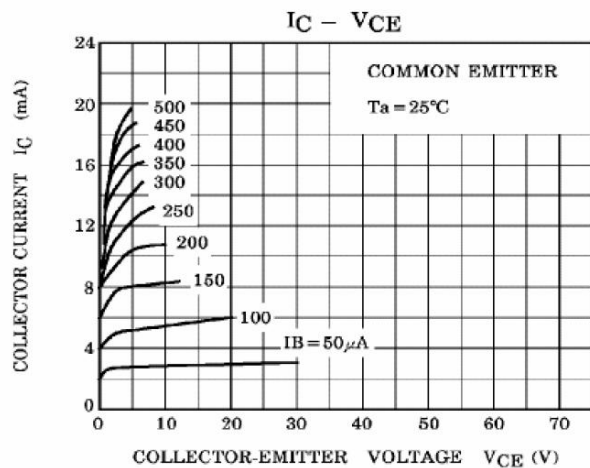
ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	4	V
Collector Current - Continuous	I_C	20	mA
Collector Power Dissipation	P_C	100	mW
Junction, Storage Temperature	T_J, T_{STG}	125, -55~125	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	40	-	-	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}	-	-	0.5	μA	$V_{CB}=18\text{V}, I_E=0$
Emitter Cut-Off Current	I_{EBO}	-	-	0.5	μA	$V_{EB}=4\text{V}, I_C=0$
DC Current Gain	h_{FE}	40	-	200		$V_{CE}=6\text{V}, I_C=1\text{mA}$
Transition Frequency	f_T	-	550	-	MHz	$V_{CE}=6\text{V}, I_C=1\text{mA}$
Reverse Transfer Capacitance	C_{re}	-	0.7	-	pF	$V_{CB}=6\text{V}, I_E=0, f=1\text{MHz}$
Noise Figure	NF	-	2.5	5	dB	$V_{CE}=6\text{V}, I_C=1\text{mA}, f=100\text{MHz}$

CHARACTERISTIC CURVES



CHARACTERISTIC CURVES

