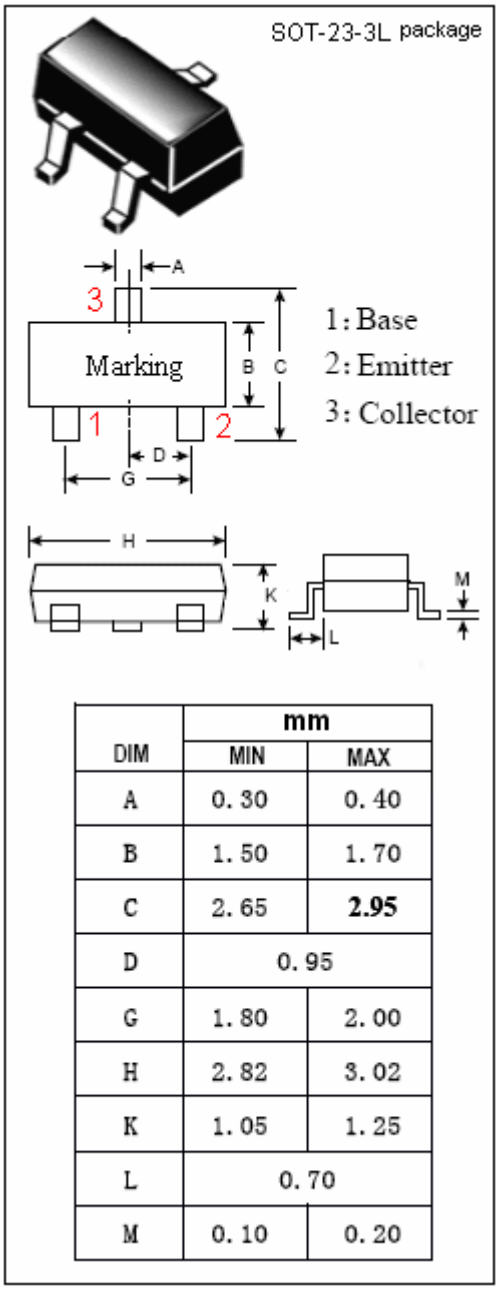
isc Silicon NPN RF Transistor 2SC2735

DESCRIPTION

- Low Noise
- High Gain

APPLICATIONS

- Designed for use in UHF ~ VHF local oscillator, frequency converter.



DIM	mm	
	MIN	MAX
A	0.30	0.40
B	1.50	1.70
C	2.65	2.95
D	0.95	
G	1.80	2.00
H	2.82	3.02
K	1.05	1.25
L	0.70	
M	0.10	0.20

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	30	V
V_{CEO}	Collector-Emitter Voltage	20	V
V_{EBO}	Emitter-Base Voltage	3	V
I_C	Collector Current-Continuous	50	mA
P_C	Collector Power Dissipation @T_C=25℃	0.15	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 10μA ; I_E= 0	30			V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 1mA ; R_{BE}= ∞	20			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 10μA ; I_C= 0	3			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 20mA ; I_B= 4mA			1.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 10V; I_E= 0			0.5	μA
h_{FE}	DC Current Gain	I_C= 10mA ; V_{CE}= 10V	40			
f_T	Current-Gain—Bandwidth Product	I_C= 10mA ; V_{CE}= 10V	600	1200		MHz
C_{OB}	Output Capacitance	I_E= 0 ; V_{CB}= 10V;f= 1.0MHz		0.85	1.5	pF
CG	Conversion Gain	I_C= 2mA ; V_{CC}= 12V;f= 200MHz f_{OSC}= 230MHz(0dBm)		21		dB
NF	Noise Figure	I_C= 2mA ; V_{CC}= 12V;f= 200MHz f_{OSC}= 230MHz(0dBm)		6.5		dB
V_{OSC}	Oscillating output voltage	I_C= 7mA;V_{CC}= 12V;f_{OSC}= 300MHz		210		mV
V_{OSC}	Oscillating output voltage	I_C= 7mA;V_{CC}= 12V;f_{OSC}= 930MHz		130		mV

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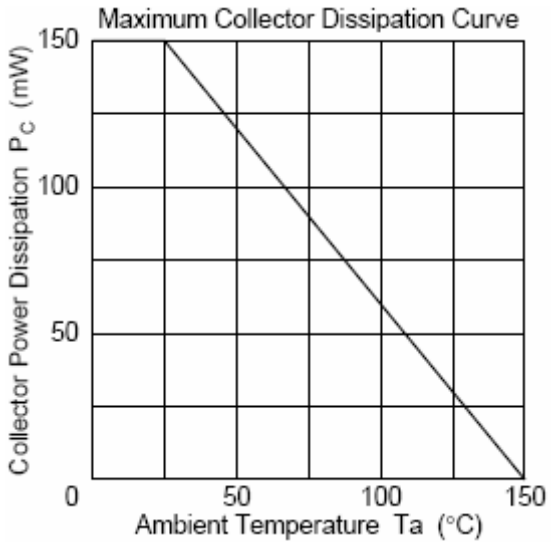

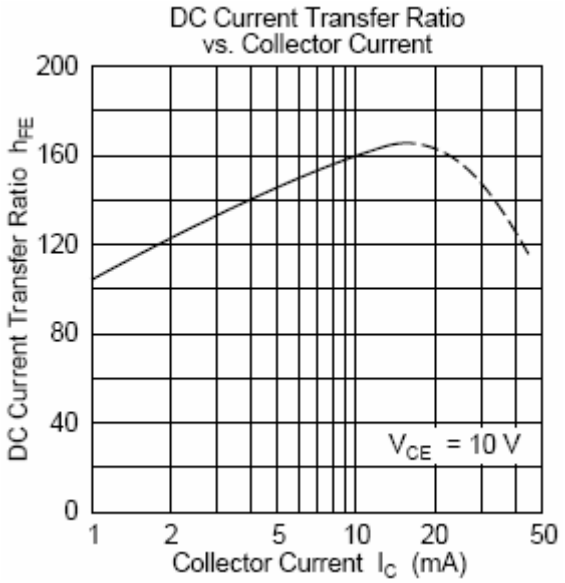

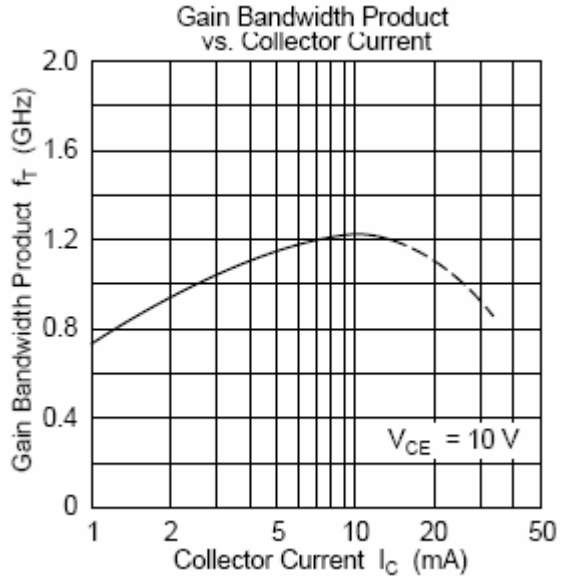

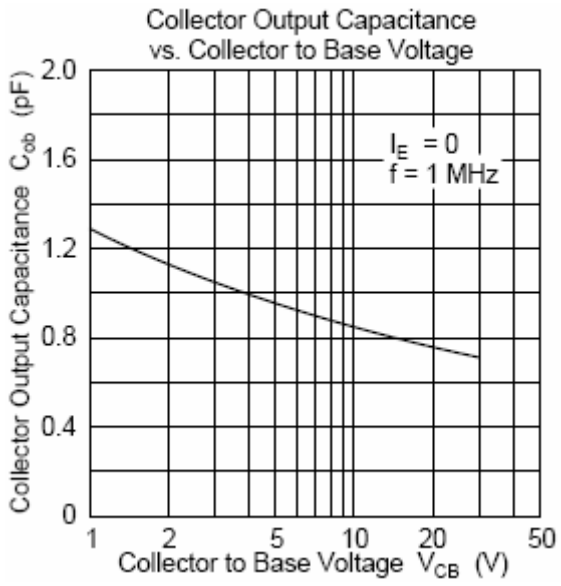

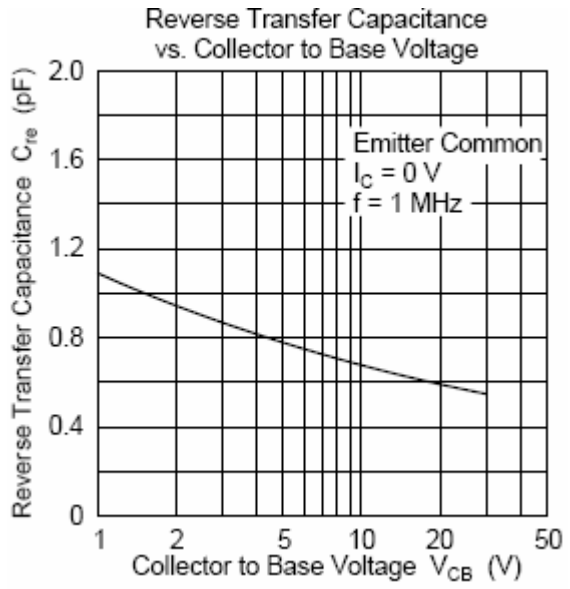

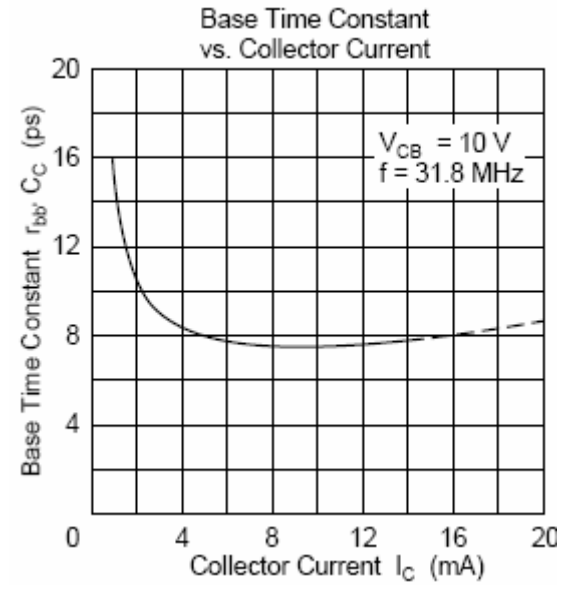

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