DESCRIPTION

The 2SC2757 is available in SOT-23 package.

FEATURE

- AM/FM Amplifier, Local Oscillator of FM/VHF Tuner
- High Current Gain Bandwidth Product f_T = 1.1 GHz (Typ.)

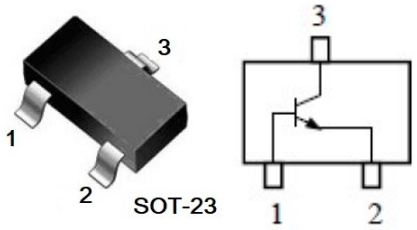
APPLICATION

- AM/FM Amplifier, Local Oscillator of FM/VHF Tuner.

ORDERING INFORMATION

Package Type	Part Number
SOT-23	2SC2757
SPQ	3,000pcs/Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION



PIN#	DESCRIPTION
1	Base
2	Collector
3	Emitter

ABSOLUTE MAXIMUM RATINGS

T_A = 25°C, unless otherwise specified.

V_{CBO}, Collector-Base Voltage	30 V
V_{CEO}, Collector-Emitter Voltage	15 V
V_{EBO}, Emitter-Base Voltage	5 V
I_C, Collector Current-Continuous	50 mA
P_C, Collector Power Dissipation	150 mW
T_J, Junction Temperature	150 °C
T_{stg}, Storage Temperature	-55 ~ +150 °C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

ELECTRICAL CHARACTERISTICS

T_A=25℃ unless otherwise specified.

Parameter	Symbols	Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C = 100 μA, I_E = 0	30	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = 1 mA, I_B = 0	15	-	-	V
Collector-Base Breakdown Voltage	$V_{(BR)EBO}$	I_C = 100μA, I_C = 0	5	-	-	V
Collector Cut-off Current	I_{CBO}	V_{CB} = 12 V, I_E = 0	-	-	0.05	μA
Collector Cut-off Current	I_{CEO}	V_{CE} = 12 V, I_E = 0	-	-	0.1	μA
Emitter Cut-off Current	I_{EBO}	V_{EB} = 3 V, I_C = 0	-	-	0.1	μA
DC Current Gain	h_{FE}	V_{CE} = 5 V, I_C = 1 mA	105	-	195	-
Collector-Emitter Saturation Voltage	V_{CE} (sat)	I_C = 10 mA, I_B = 1 mA,	-	-	0.5	V
Base-Emitter Saturation Voltage	V_{BE} (sat)	I_C = 10 mA, I_B = 1 mA,	-	-	1.4	V
Transition Frequency	f_T	V_{CE} = 5 V, I_C = 5 mA, f = 400 MHz	600	-	-	MHz

TYPICAL CHARACTERISTICS

Fig 1. Collector Current vs. Collector-Emitter Voltage

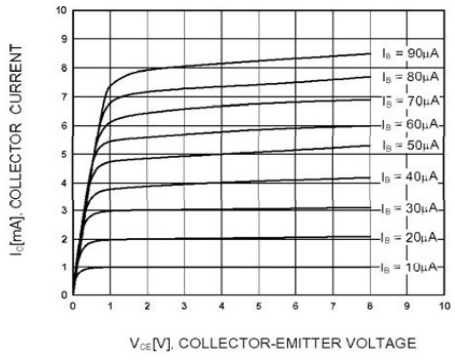


Fig 2. DC Current Gain

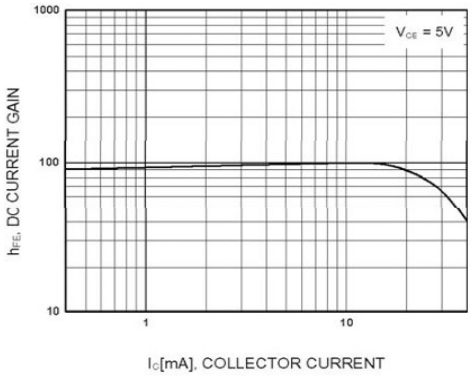


Fig 3. Base-Emitter Saturation Voltage vs. Collector-Emitter Saturation Voltage

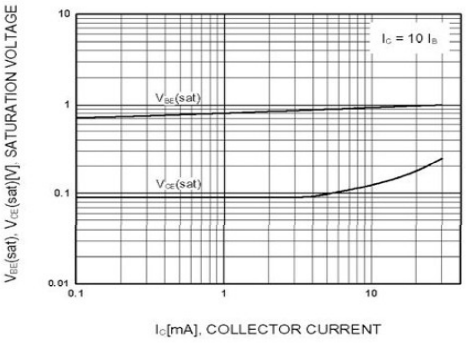
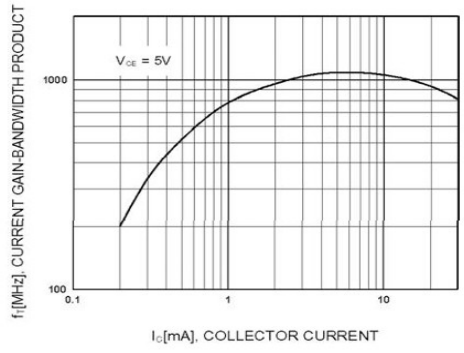
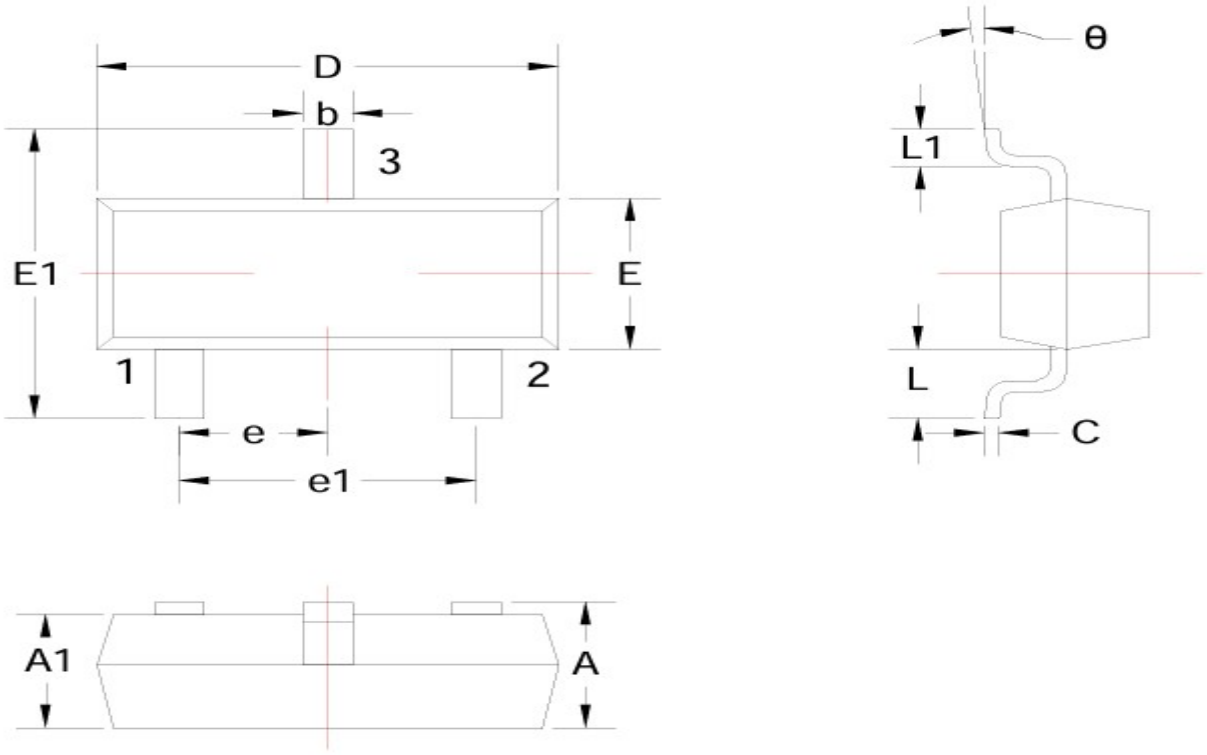


Fig 4. Current Gain Band Width Product



PACKAGE INFORMATION

Dimension in SOT-23 (Unit: mm)



Symbol	Millimeter	
	Min.	Max.
A	0.900	1.150
A1	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950 TYP.	
e1	1.800	2.000
L	0.550 REF	
L1	0.300	0.500
θ	0°	8°

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