DESCRIPTION

The 2SC5343Q~2SC5343S is available in SOT-23 Package

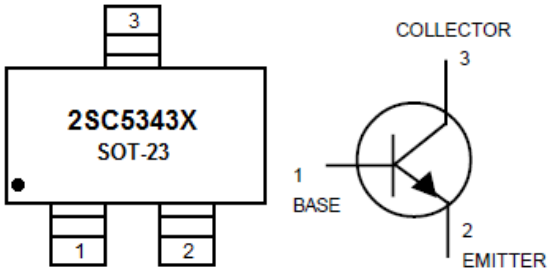
FEATURES

- Excellent h_{FE} linearity
  $h_{FE}(2)$=100(TYP) at V_{CE}=6V,I_C=150mA
  $h_{FE}(I_C$=0.1mA)/$h_{FE}(I_C$=2mA)=0.95(TYP)
- Low noise: NF=1dB(TYP).at f=1KHz.
- RoHS Compliant
- Available in SOT-23 Package

ORDERING INFORMATION

Package Type	Part Number
SOT-23	2SC5343Q
	2SC5343R
	2SC5343S
Note	3,000pcs/ Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION



ABSOLUTE MAXIMUM RATINGS

V_{CEO}, Collector-Emitter Voltage	50V
V_{CBO}, Collector-Base Voltage	60V
V_{EBO}, Emitter-Base Voltage	5V
I_C, Collector current-continuoun	150mA
I_B, Collector current-continuoun	50mA
PC, Collector Dissipation	200mW
T_J,T_{STG}, Junction and Storage Temperature	-55℃~150℃

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 noted

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA,I_E=0	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=10mA,I_B=0	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=10μA,I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=60V,I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=5V,I_C=0			0.1	μA
DC current gain	h_{FE}	V_{CE}=6V,I_C=1mA	120		560	
Collector-emitter saturation voltage	$V_{CE(SAT)}$	I_C=100mA, I_B=10mA		0.1	0.25	V
Transition frequency	f_T	V_{CE}=10V, I_C= 1mA	80			MHz
Output capacitance	C_{OB}	V_{CB}=10V, I_E=0,f=1kHz			3.5	pF
Noise Figure	NF	V_{CE}=6V,I_C=0.1mA,f=1kHz			10	dB

CLASSIFICATION OF h_{FE}

Rank	Q	R	S
Range	120-270	180-390	270-560

TYPICAL CHARACTERISTICS

Figure 1. P_C –T_A

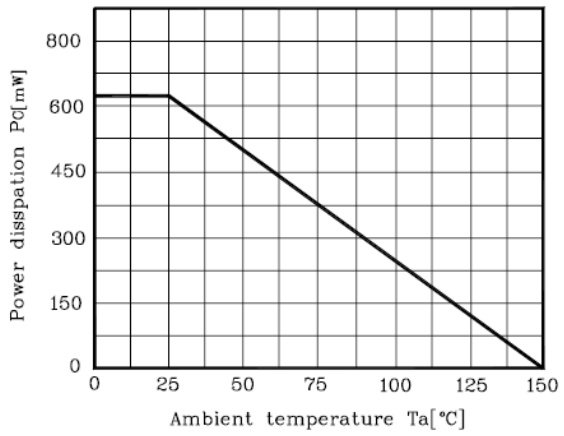


Figure 2. I_C – V_{BE}

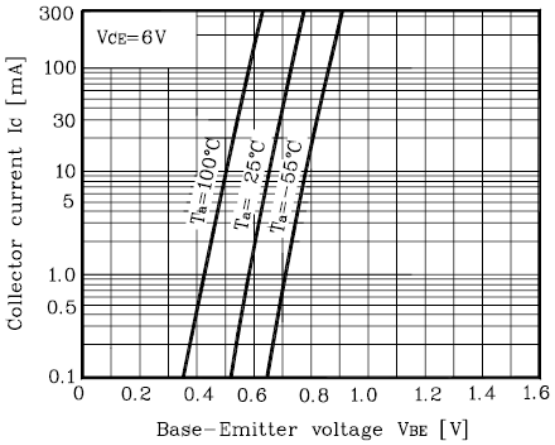


Figure 3. I_C – V_{CE}

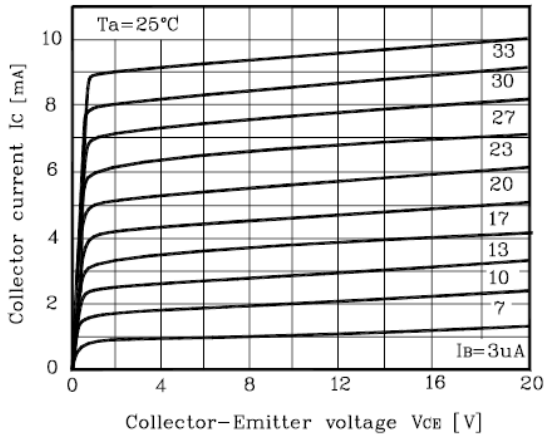


Figure 4. h_{FE} – I_C

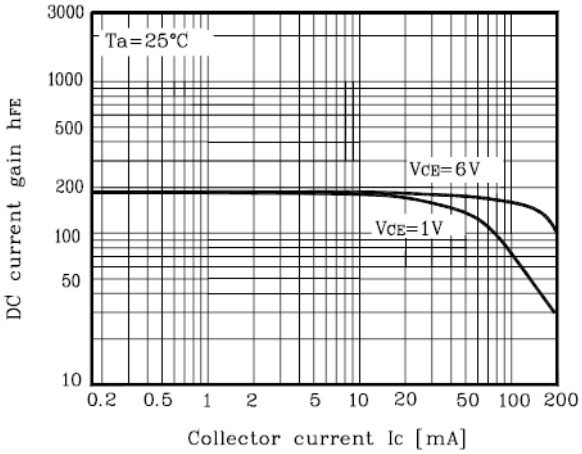
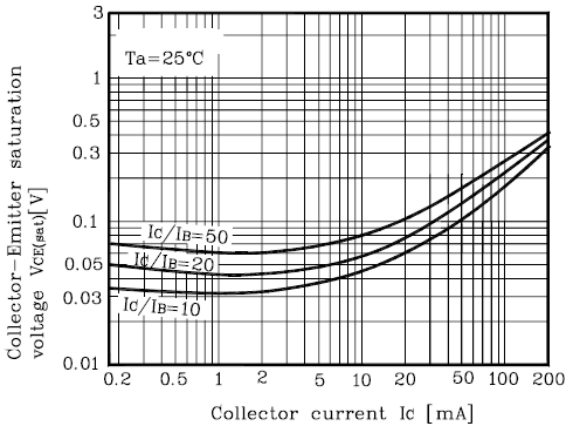
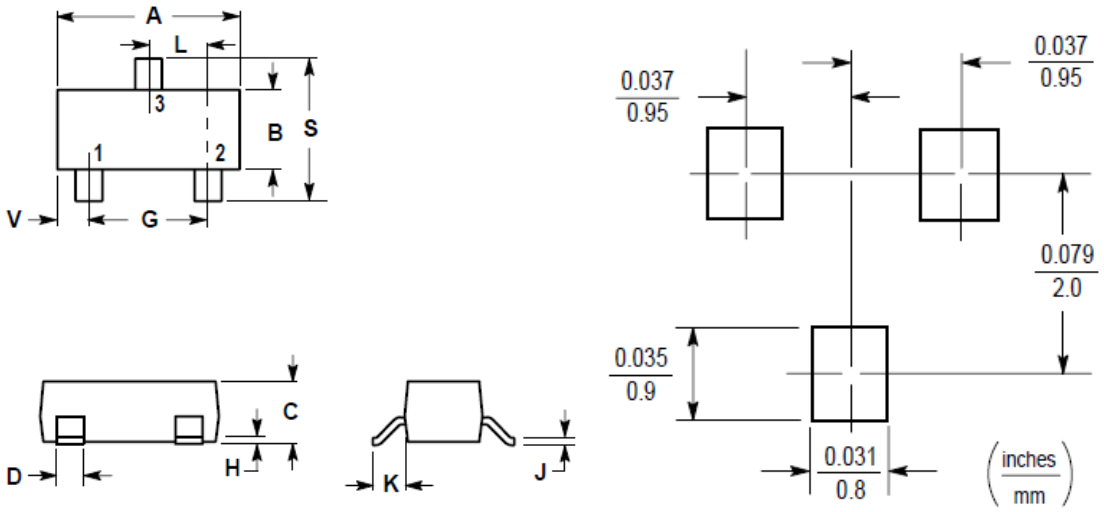


Figure 5. $V_{CE(SAT)}$ – I_C



PACKAGE INFORMATION

Dimension in SOT-23 (Unit: mm)



Symbol	Min	Max
A	2.800	3.040
B	1.200	1.400
C	0.890	1.110
D	0.370	0.500
G	1.780	2.040
H	0.013	0.100
J	0.085	0.177
K	0.350	0.690
L	0.890	1.020
S	2.100	2.640
V	0.450	0.600

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