

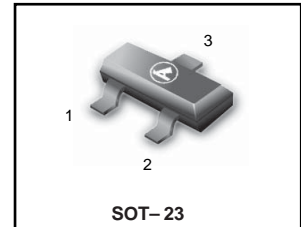
General Purpose Transistors

NPN Silicon

L2SC5343QLT1G Series

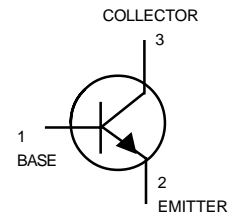
FEATURE

- Excellent h_{FE} linearity
 $:h_{FE}(2)=100(\text{Typ})$ at $V_{CE}=6V, I_C=150\text{Ma}$
 $:h_{FE}(I_C=0.1\text{mA})/h_{FE}(I_C=2\text{mA})=0.95(\text{Typ})$.
- Low noise: $NF=1\text{Db}(\text{Typ})$.at $f=1\text{KHz}$.
- We declare that the material of product compliance with RoHS requirements.



DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
L2SC5343QLT1G	7Q	3000/Tape&Reel
L2SC5343QLT3G	7Q	10000/Tape&Reel
L2SC5343RLT1G	7R	3000/Tape&Reel
L2SC5343RLT3G	7R	10000/Tape&Reel
L2SC5343SLT1G	7S	3000/Tape&Reel
L2SC5343SLT3G	7S	10000/Tape&Reel



MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CEO}	50	V
Collector-Base Voltage	V_{CBO}	60	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector current-continuoun	I_C	150	mA
Collector current-continuoun	I_B	50	mA
Collector Dissipation	P_C	200	mW
Junction and Storage Temperature	T_j, T_{stg}	-55~150	°C

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ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	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

L2SC5343QLT1G Series

Electrical Characteristic Curves

Fig. 1 $P_C - T_a$

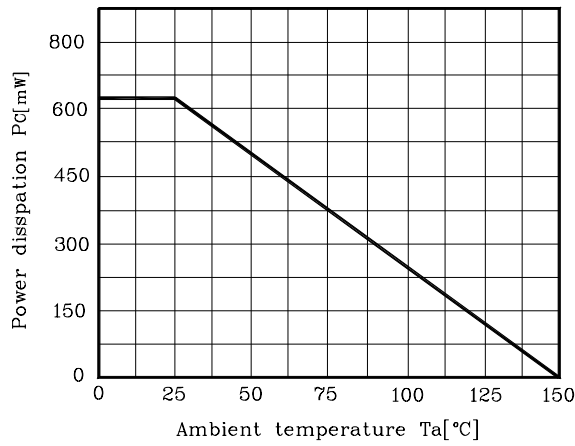


Fig. 2 $I_C - V_{BE}$

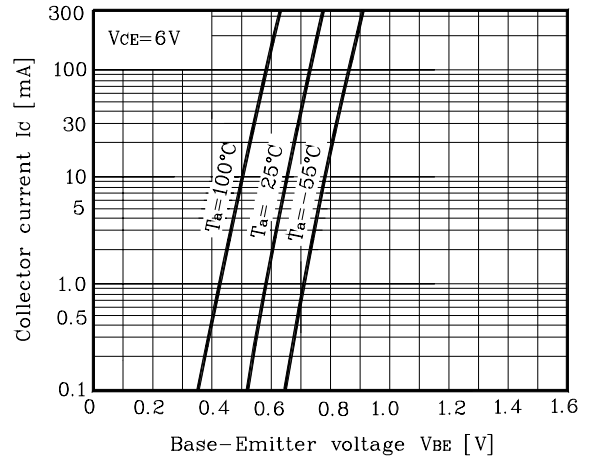


Fig. 3 $I_C - V_{CE}$

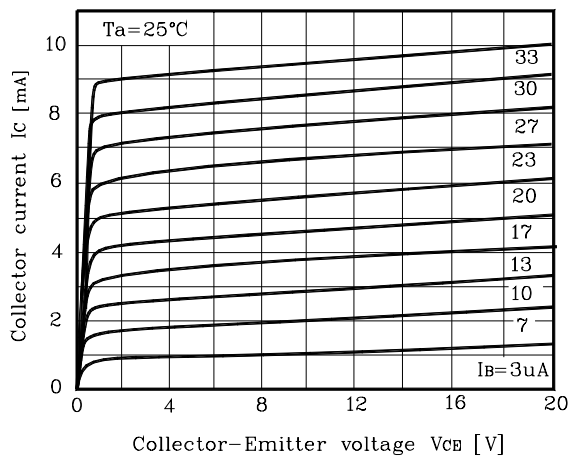


Fig. 4 $h_{FE} - I_C$

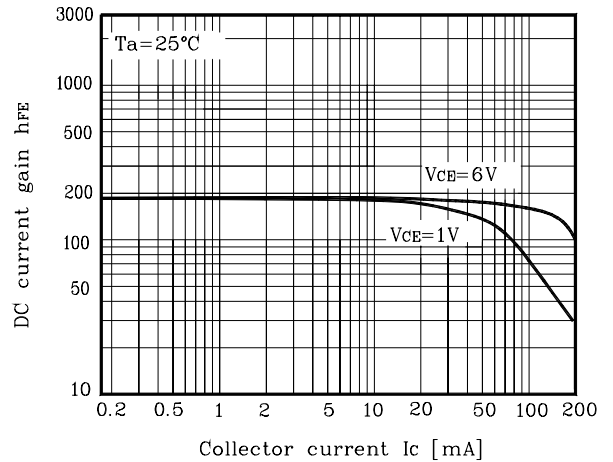
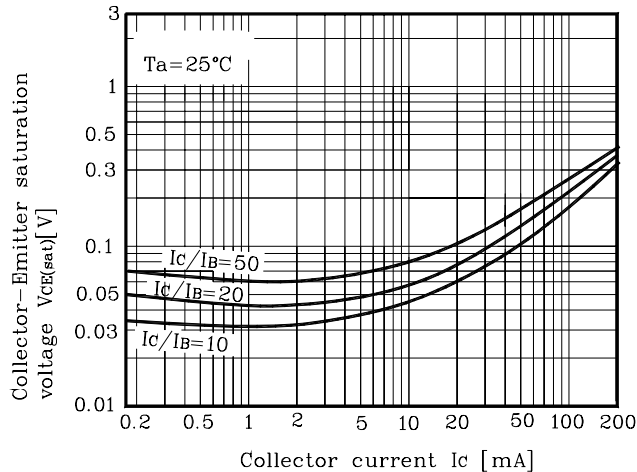
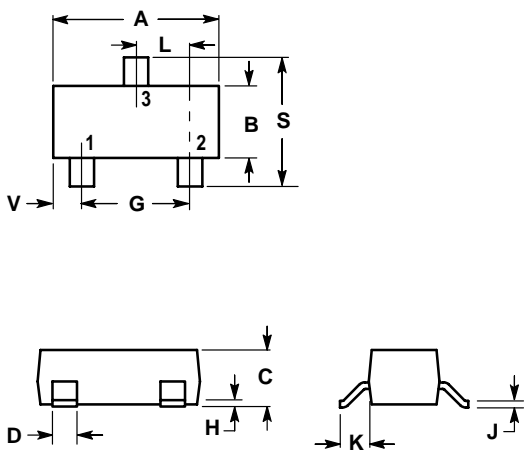


Fig. 5 $V_{CE(sat)} - I_C$



L2SC5343QLT1G Series

SOT-23



NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.1102	0.1197	2.80	3.04
B	0.0472	0.0551	1.20	1.40
C	0.0350	0.0440	0.89	1.11
D	0.0150	0.0200	0.37	0.50
G	0.0701	0.0807	1.78	2.04
H	0.0005	0.0040	0.013	0.100
J	0.0034	0.0070	0.085	0.177
K	0.0140	0.0285	0.35	0.69
L	0.0350	0.0401	0.89	1.02
S	0.0830	0.1039	2.10	2.64
V	0.0177	0.0236	0.45	0.60

- PIN 1. BASE
 2. EMITTER
 3. COLLECTOR

