

2SC4617XT1G

General Purpose Transistors NPN Silicon

Description

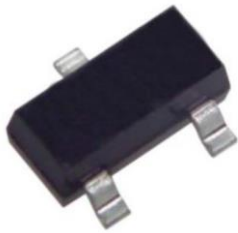
We declare that the material of product compliance with RoHS requirements

Mechanical Data

- Case: SOT-523 Molded plastic
- Epoxy: UL94V-O rate flame retardant

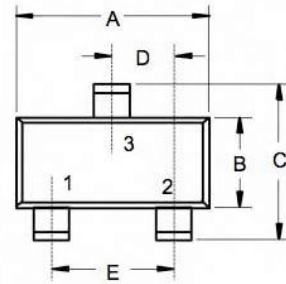
Packing & Order Information

3,000/Reel

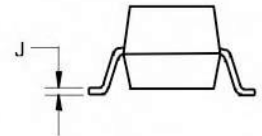
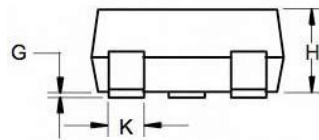


**RoHS
COMPLIANT**

SOT-523

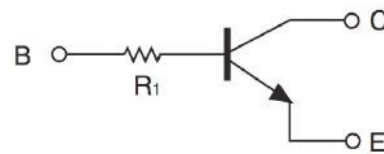


1. Base
2. Emitter
3. Collector



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.059	.067	1.50	1.70	
B	.030	.033	0.75	0.85	
C	.057	.069	1.45	1.75	
D	.020 Nominal		0.50 Nominal		
E	.035	.043	0.90	1.10	
G	.000	.004	.000	.100	
H	.028	.031	.70	0.80	
J	.004	.008	.100	.200	
K	.010	.014	.25	.35	

Graphic symbol



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Absolute maximum ratings (Ta=25°C)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	60	V
V _{CEO}	Collector-Emitter Voltage	50	V
V _{EBO}	Emitter-Base Voltage	7	V
I _C	Collector Current	0.15	A
P _C	Collector Dissipation	0.15	W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55 to +150	°C

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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Symbol	Parameter	Test Conditions	MIN	TYP	MAX	UNIT
BV _{CBO}	Collector-base breakdown voltage	I _C = 50μA	60			V
BV _{CEO}	Collector-emitter breakdown voltage	I _C = 1 mA	50			V
BV _{EBO}	Emitter-base breakdown voltage	I _E = 50μA	7			V
I _{CBO}	Collector cut-off current	V _{CB} = 60 V			0.1	μA
I _{EBO}	Emitter cut-off current	V _{EB} = 7 V			0.1	μA
h _{FE}	DC current gain	V _{CE} = 6 V , I _C = 1 mA	120		560	--
V _{CE(sat)}	Collector-emitter saturation voltage	I _C /I _B = 50 mA / 5 mA			0.5	V
f _T	Transition frequency	V _{CE} = 12 V , I _E = 2 mA f = 30MHz		180		MHz
C _{ob}	Collector output capacitance	V _{CB} = 12 V , I _E = 0 A f = 1.0MHz		2.0	3.5	pF

h_{FE} values are classified as follows :

Item	Q	R	S
h _{FE}	120-170	180-390	270-560

ORDERING INFORMATION

Device	Marking	Shipping
2SC4617QT1G	BQ	3000 Tape & Reel
2SC4617QT3G	BQ	10000 Tape & Reel
2SC4617RT1G	BR	3000 Tape & Reel
2SC4617RT3G	BR	10000 Tape & Reel
2SC4617ST1G	BS	3000 Tape & Reel
2SC4617ST3G	BS	10000 Tape & Reel

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■ RATINGS AND CHARACTERISTIC CURVES

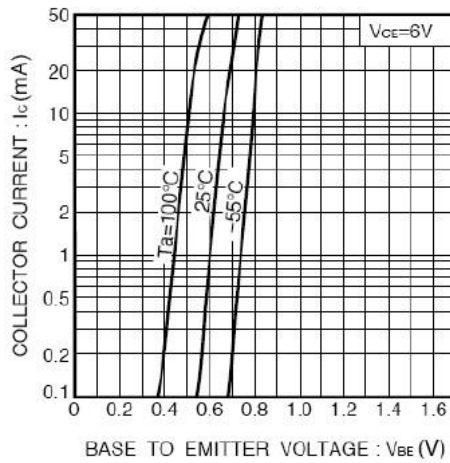


FIG.1 - GROUNDED EMITTER PROPAGATION CHARACTERISTICS

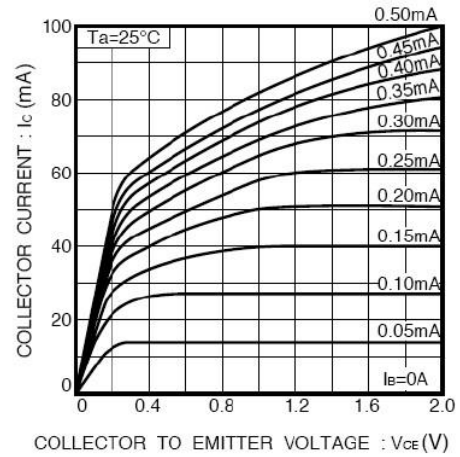


FIG.2 - GROUNDED EMITTER PROPAGATION CHARACTERISTICS (I)

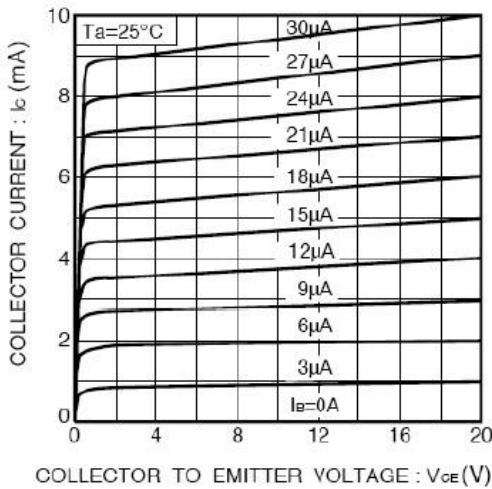


FIG.3 - GROUNDED EMITTER PROPAGATION CHARACTERISTICS (II)

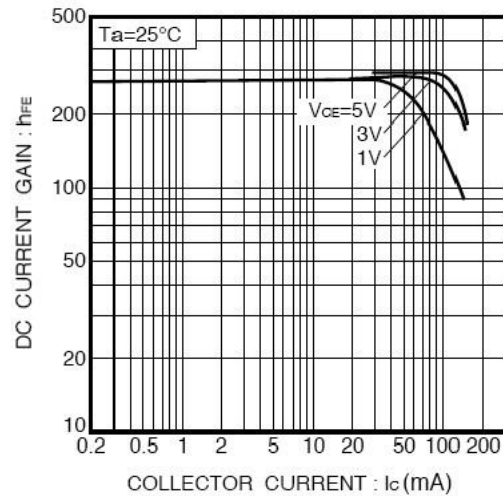


FIG.4 - DC CURRENT GAIN VS. COLLECTOR CURRENT (I)

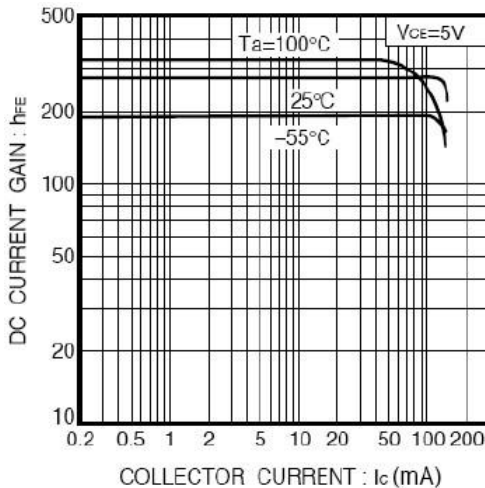


FIG.5 - DC CURRENT GAIN VS. COLLECTOR CURRENT (II)

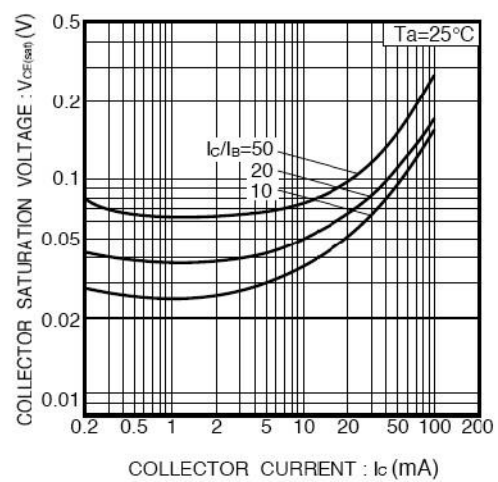


FIG.6 - COLLECTOR-EMITTER SATURATION VOLTAGE VS. COLLECTOR CURRENT

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■ RATINGS AND CHARACTERISTIC CURVES

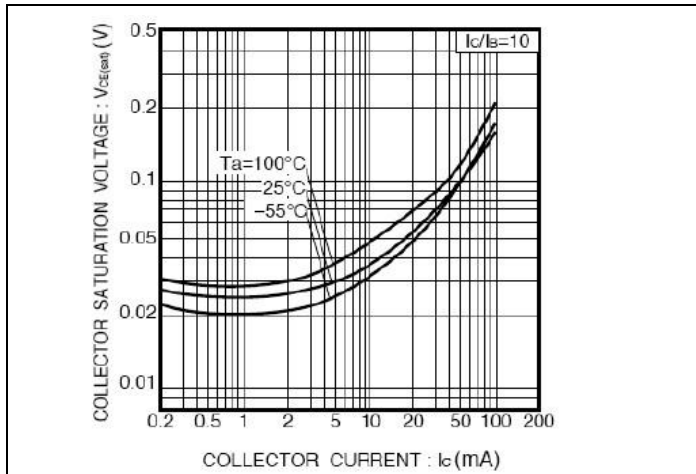


FIG.7 –COLLECTOR-EMITTER SATURATION VOLTAGE VS. COLLECTOR CURRENT(II)

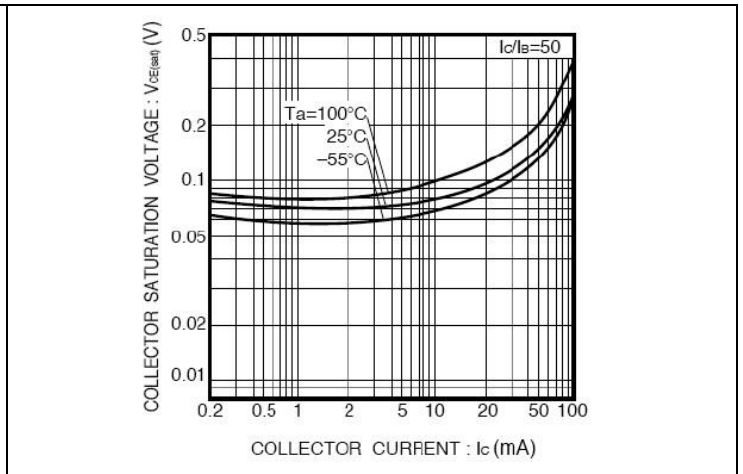


FIG.8 –COLLECTOR-EMITTER SATURATION VOLTAGE VS. COLLECTOR CURRENT(III)

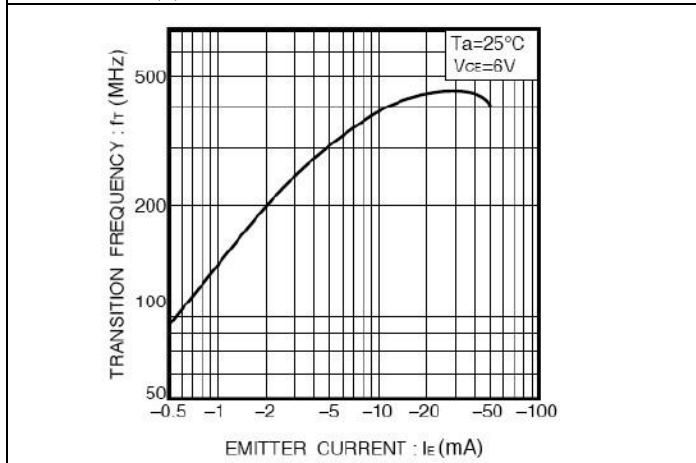


FIG.9 –GAIN BANDWIDTH PRODUCT VS. EMITTER CURRENT

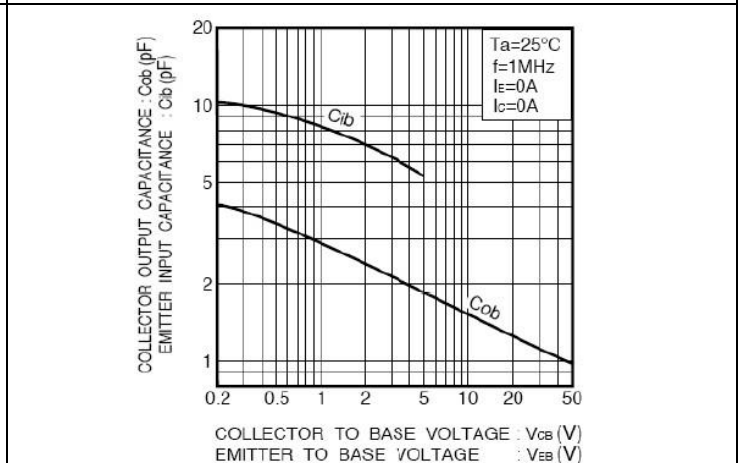


FIG.10 –COLLECTOR OUTPUT CAPACITANCE VS.COLLECTOR-BASE VOLTAGE

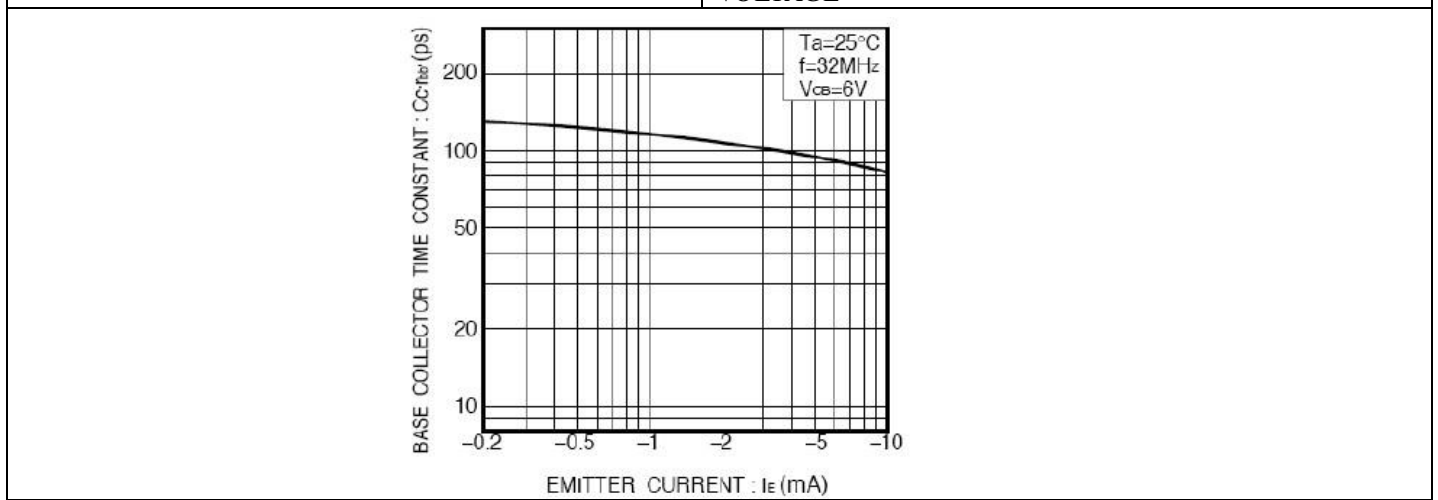


FIG.11 –BASE-COLLECTOR TIME CONSTANCT VS. EMITTER CURRENT

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Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE

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