2SC4617XT1G

General Purpose Transistors NPN Silicon

Description

We declare that the material of product compliance with RoHS requirements

Mechanical Data

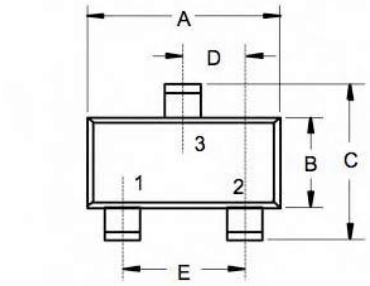
- Case: SOT-523 Molded plastic
- Epoxy: UL94V-O rate flame retardant

Packing & Order Information

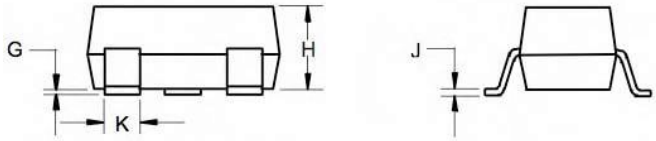
3,000/Reel

RoHS
COMPLIANT

SOT-523

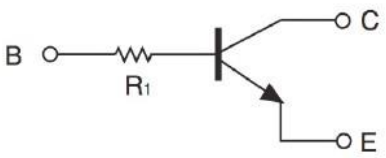


1. Base
2. Emitter
3. Collector



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.059	.067	1.50	1.70	
B	.030	.033	0.75	0.85	
C	.057	.069	1.45	1.75	
D	.020 Nominal		0.50Nominal		
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_{CBO}	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
Tj	Junction Temperature	150	°C
Tstg	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

hFE values are classified as follows:			
Item	Q	R	S
hFE	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

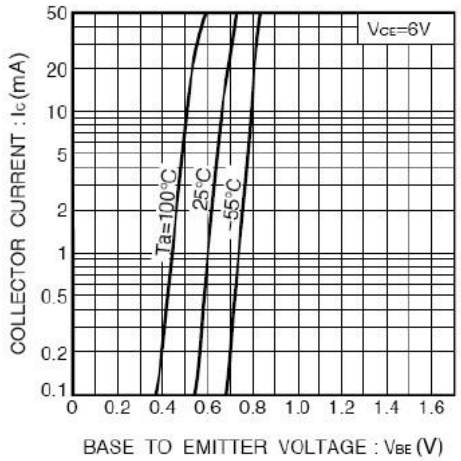

FIG.1 – GROUNDED EMITTER PROPAGATION CHARACTERISTICS

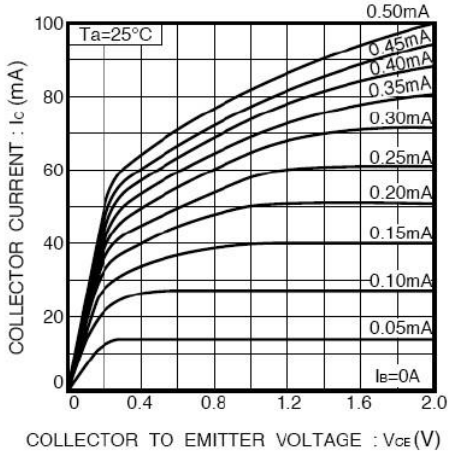

FIG.2 –GROUNDED EMITTER PROPAGATION CHARACTERISTICS(I)

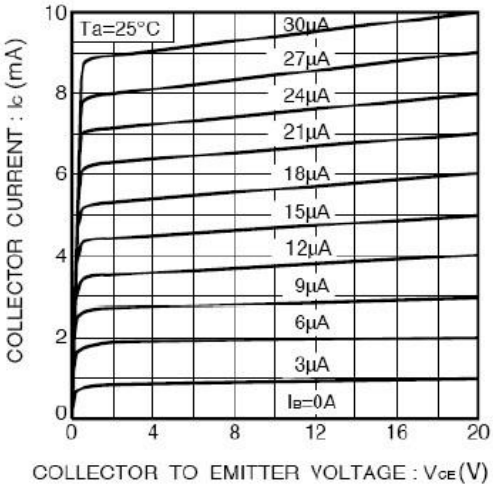

FIG.3 – GROUNDED EMITTER PROPAGATION CHARACTERISTICS(II)

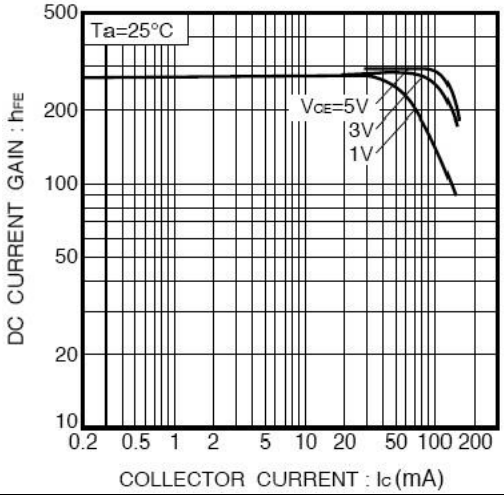

FIG.4 –DC CURRENT GAIN VS. COLLECTOR CURRENT(I)

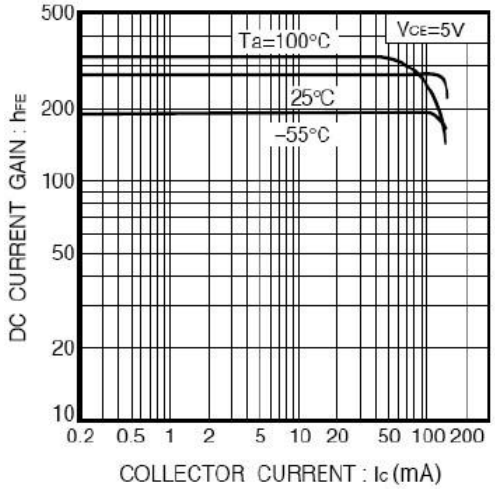

FIG.5 –DC CURRENT GAIN VS. COLLECTOR CURRENT(II)

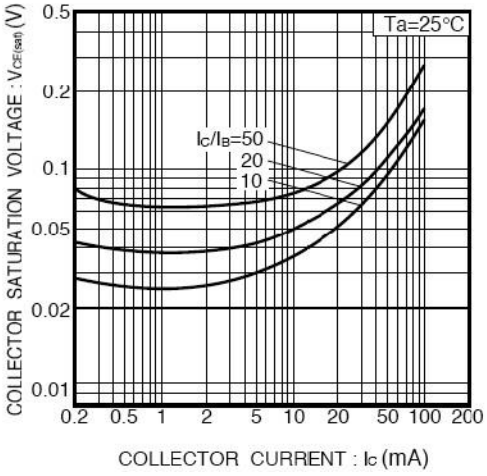

FIG.6 –COLLECTOR-EMITTER SATURATION VOLTAGE VS. COLLECTOR CURRENT

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■RATINGS AND CHARACTERISTIC CURVES

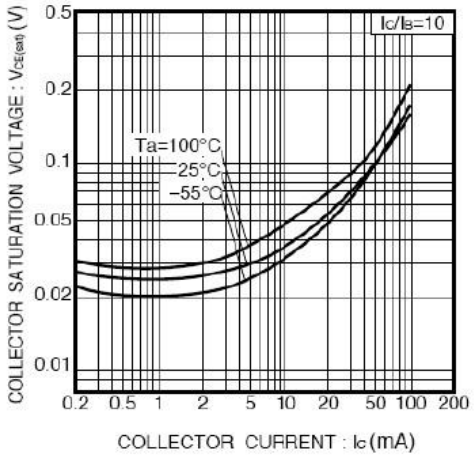

FIG.7 –COLLECTOR-EMITTER SATURATION VOLTAGE VS. COLLECTOR CURRENT(II)

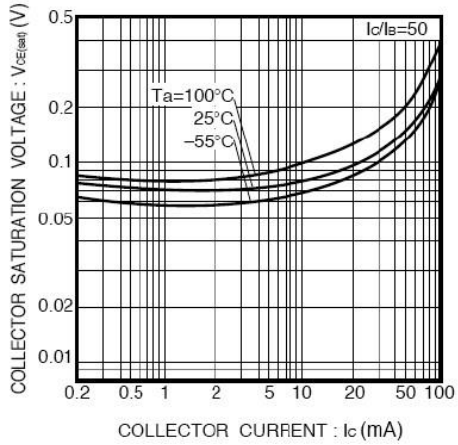

FIG.8 –COLLECTOR-EMITTER SATURATION VOLTAGE VS. COLLECTOR CURRENT(III)

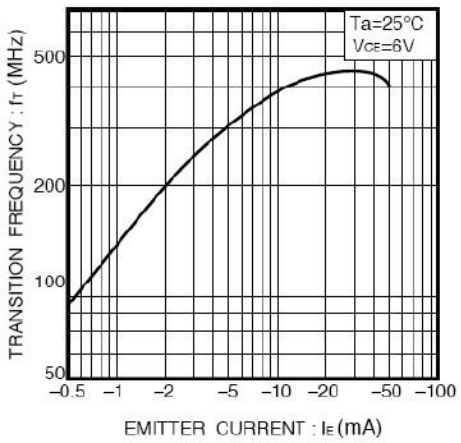

FIG.9 –GAIN BANDWIDTH PRODUCT VS. EMITTER CURRENT

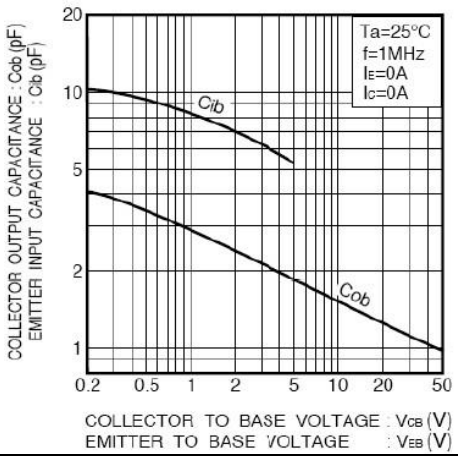

FIG.10 –COLLECTOR OUTPUT CAPACITANCE VS.COLLECTOR-BASE VOLTAGE

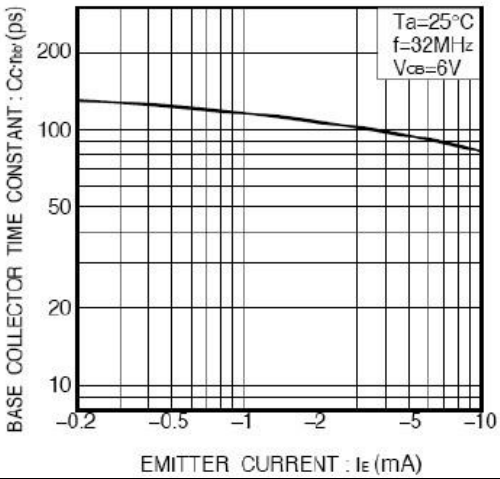

FIG.11 –BASE-COLLECTOR TIME CONSTANCT VS. EMITTER CURRENT

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