

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

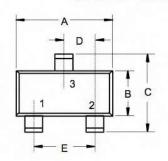
Packing & Order Information

3,000/Reel

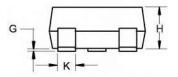


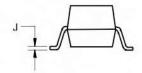


SOT-523



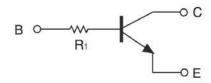
Base
 Emitter
 Collector





		DIMEN	ISIONS		
	INCHES		мм		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.059	.067	1.50	1.70	
В	.030	.033	0.75	0.85	
C	.057	.069	1.45	1.75	
D	.020 N	lominal	0.50Nom	inal	
E	.035	.043	0.90	1.10	
G	.000	.004	.000	.100	
Н	.028	.031	.70	0.80	
J	.004	.008	.100	.200	
K	.010	.014	.25	.35	

Graphic symbol



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Absolute m	naximum 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	А
Pc	Collector Dissipation	0.15	W
Tj	Junction Temperature	150	°C
Tstg	Storage Temperature Range	-55 to +150	°C



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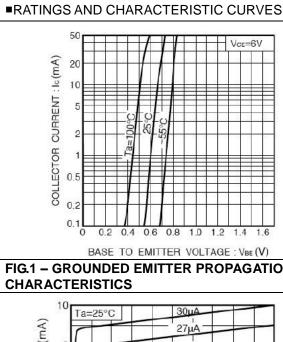
ELECTRIC	CAL CHARACTERISTICS @ Ta=25°C u	nless otherwise specified				
Symbol	Parameter	Test Conditions	MIN	TYP	MAX	UNIT
BV_CBO	Collector-base breakdown voltage	$I_C = 50\mu A$	60			V
BV _{CEO}	Collector-emitter breakdown voltage	I _C = 1 mA	50			V
BV_{EBO}	Emitter-base breakdown voltage	I _E = 50μA	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	$V_{CE} = 6 \text{ V}$, $I_{C} = 1 \text{ mA}$	120		560	
$V_{\text{CE(sat)}}$	Collector-emitter saturation voltage	$I_{\rm C}/I_{\rm B} = 50 {\rm mA} / 5 {\rm mA}$			0.5	V
f _T	Transition frequency	$V_{CE} = 12 \text{ V}$, $I_E = 2 \text{ mA}$ f = 30 MHz		180		MHz
C _{ob}	Collector output capacitance	$V_{CB} = 12 \text{ V}, I_{E} = 0 \text{ A}$ f = 1.0MHz		2.0	3.5	pF

hFE values are classified a	s 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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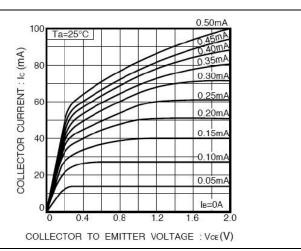


FIG.1 - GROUNDED EMITTER PROPAGATION

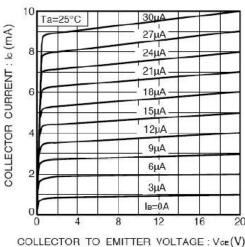


FIG.2 - GROUNDED EMITTER PROPAGATION CHARACTERISTICS(I)

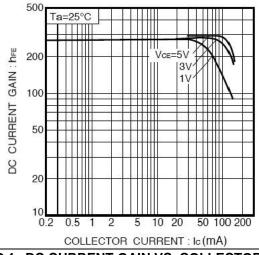


FIG.3 - GROUNDED EMITTER PROPAGATION **CHARACTERISTICS(II)**

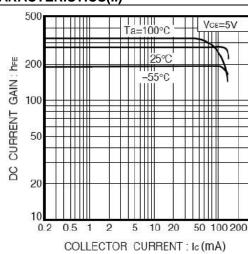


FIG.4 -DC CURRENT GAIN VS. COLLECTOR CURRENT(I)

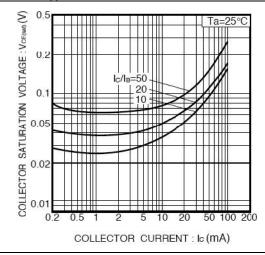


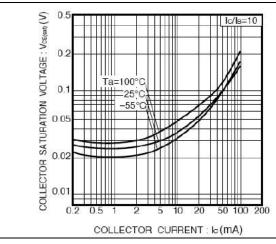
FIG.5 -DC CURRENT GAIN VS. COLLECTOR **CURRENT(II)**

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



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■RATINGS AND CHARACTERISTIC CURVES



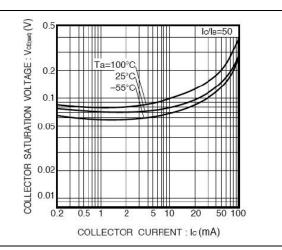
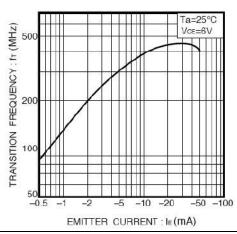


FIG.7 -COLLECTOR-EMITTER
SATURATION VOLTAGE VS. COLLECTOR
CURRENT(II)

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



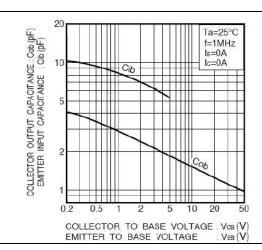


FIG.9 –GAIN BANDWIDTH PRODUCT VS. EMITTER CURRENT

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

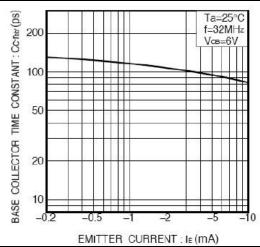


FIG.11 -BASE-COLLECTOR TIME CONSTANCT VS. EMITTER CURRENT



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