

# General Purpose Transistors

-40V,-2A Low VCE(sat) PNP Silicon

## FEATURES

- Low collector-emitter saturation voltage
- High current capability
- Improved device reliability due to reduced heat generation
- We declare that the material of product compliance with RoHS requirements.
- S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.

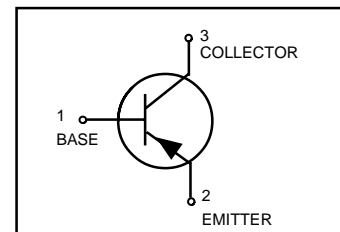
## APPLICATIONS

- Supply line switching circuits
- Battery management applications
- DC/DC converter applications
- Strobe flash units
- Heavy duty battery powered equipment (motor and lamp drivers).

## ORDERING INFORMATION

Device	Marking	Shipping
LBSS5240P3T5G S-LBSS5240P3T5G	ZF	3000/Tape & Reel

**LBSS5240P3T5G**  
**S-LBSS5240P3T5G**



## MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector–Emitter Voltage	$V_{CE0}$	-40	V
Collector–Base Voltage	$V_{CBO}$	-40	V
Emitter–Base Voltage	$V_{EBO}$	-5.0	V
Collector Current — Continuous	$I_C$	-2	A
power dissipation	$P_D$	0.3	W
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-65 ~ +150	°C

## THERMAL CHARACTERISTICS

Symbol	Parameter	Conditions	Value	Unit
$R_{th(j-a)}$	thermal resistance from junction to ambient	in free air;note 1	417	K/W
		in free air;note 2	260	K/W

### Notes:

1. Device mounted on a printed-circuit board, single sided copper, tinplated and standard footprint.
2. Device mounted on a printed-circuit board, single sided copper, tinplated and mounted pad for collector 1 cm<sup>2</sup>

**LBSS5240P3T5G,S-LBSS5240P3T5G**
**ELECTRICAL CHARACTERISTICS** ( $T_A = 25^\circ\text{C}$  unless otherwise noted.)

SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.	UNIT
$I_{CBO}$	collector-base cut-off current	$V_{CB} = -30\text{ V}; I_E = 0$	–	–100	nA
$I_{EBO}$	emitter-base cut-off current	$V_{BE} = -4\text{ V}; I_C = 0$	–	–100	nA
$h_{FE}$	DC current gain	$V_{CE} = -2\text{ V}$ $I_C = -100\text{ mA}$ $I_C = -500\text{ mA}$ $I_C = -1\text{ A}$ $I_C = -2\text{ A}$	300 260 210 100	– – – –	
$V_{CEsat}$	collector-emitter saturation voltage	$I_C = -100\text{ mA}; I_B = -1\text{ mA}$ $I_C = -500\text{ mA}; I_B = -50\text{ mA}$ $I_C = -750\text{ mA}; I_B = -15\text{ mA}$ $I_C = -1\text{ A}; I_B = -50\text{ mA}$ $I_C = -2\text{ A}; I_B = -200\text{ mA}$	– – – – –	–100 –110 –225 –225 –350	mV mV mV mV mV
$V_{BEsat}$	base-emitter saturation voltage	$I_C = -2\text{ A}; I_B = -200\text{ mA}$	–	–1.1	V
$V_{BE(on)}$	base-emitter turn-on voltage	$V_{CE} = -2\text{ V}; I_C = -100\text{ mA}$	–	–0.75	V
$f_T$	transition frequency	$I_C = -100\text{ mA}; V_{CE} = -10\text{ V};$ $f = 100\text{ MHz}$	100	–	MHz
$C_c$	collector capacitance	$V_{CB} = -10\text{ V}; I_E = I_e = 0;$ $f = 1\text{ MHz}$	–	28	pF

# LBSS5240P3T5G,S-LBSS5240P3T5G

## ELECTRICAL CHARACTERISTIC CURVES (Ta = 25°C)

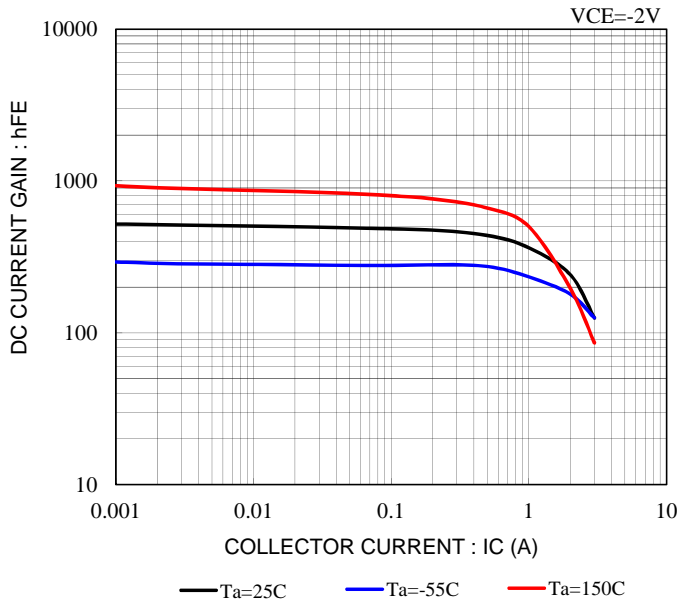


Fig.1 DC CURRENT GAIN VS.COLLECTOR CURRENT

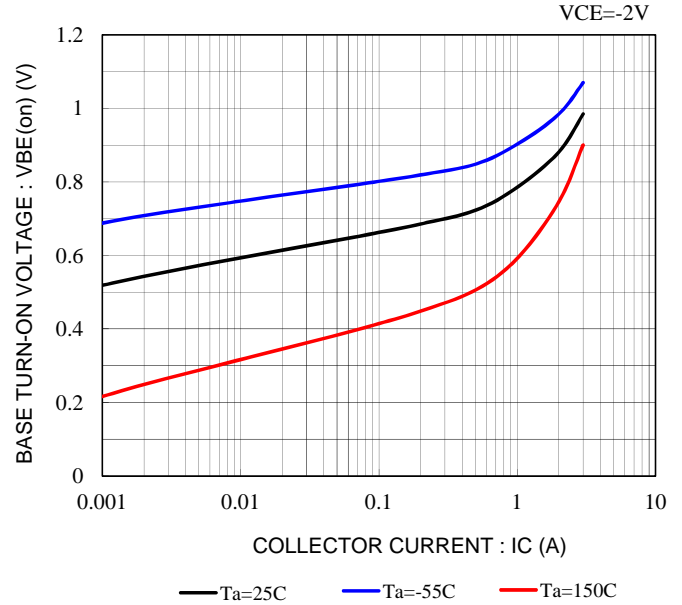


Fig.2 BASE-EMITTER TURN-ON VOLTAGE VS.COLLECTOR CURRENT

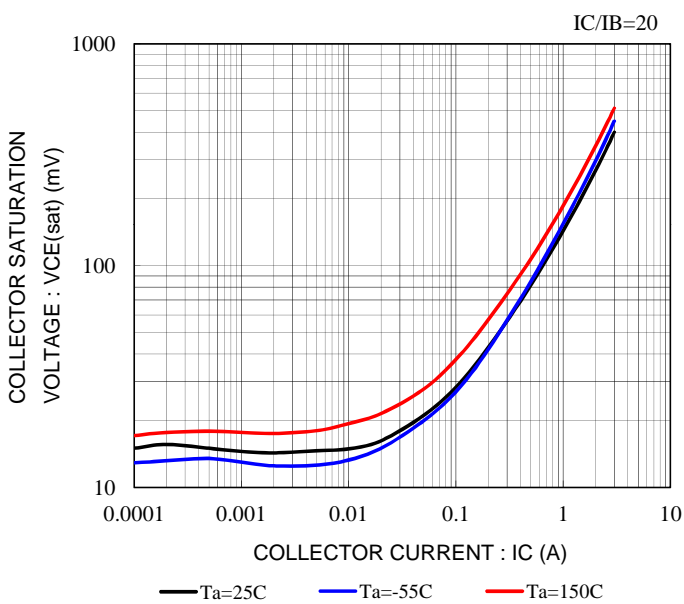


Fig.3 COLLECTOR-EMITTER SATURATION VOLTAGE VS.COLLECTOR CURRENT

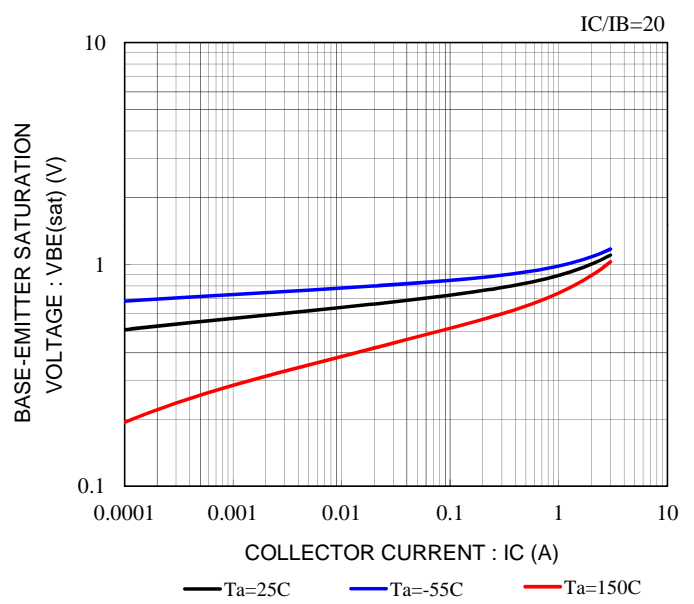


Fig.4 BASE-EMITTER SATURATION VOLTAGE VS.COLLECTOR CURRENT

# LBSS5240P3T5G,S-LBSS5240P3T5G

## ELECTRICAL CHARACTERISTIC CURVES (Ta = 25°C)

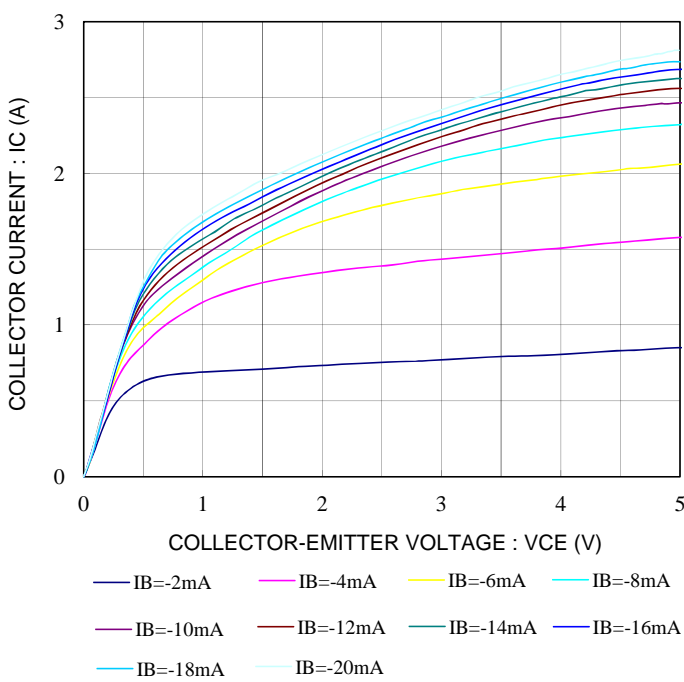


Fig.5 COLLECTOR CURRENT VS.COLLECTOR-EMITTER SATURATION VOLTAGE

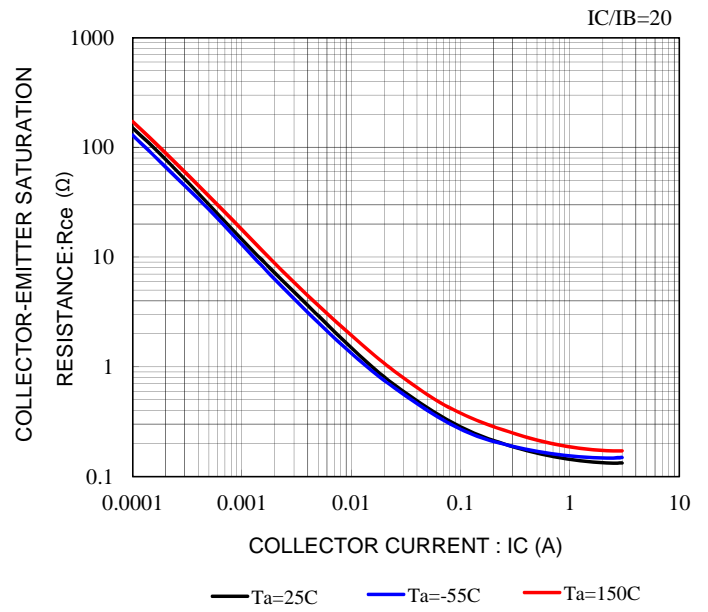
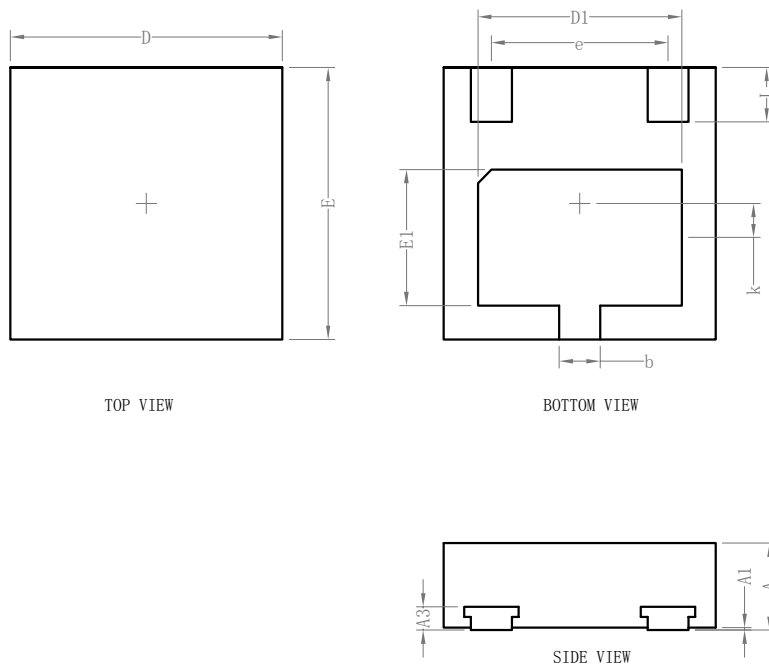


Fig.6 COLLECTOR-EMITTER SATURATION RESISTANCE VS.COLLECTOR CURRENT

**LBSS5240P3T5G,S-LBSS5240P3T5G**

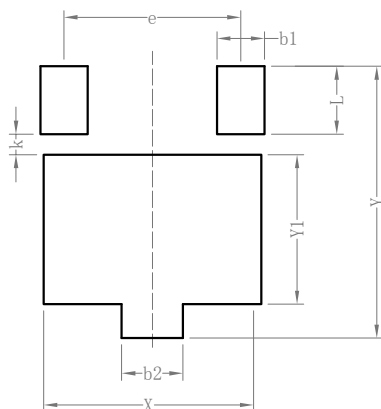
**DFN2020-3**

Package Outline Dimension



DFN2020-3			
Dim	Min.	Typ.	Max.
A	0.60	0.65	0.70
A1	0.00	0.02	0.05
A3	0.152REF.		
D	1.95	2.00	2.05
E	1.95	2.00	2.05
D1	1.45	1.50	1.55
E1	0.95	1.00	1.05
b	0.25	0.30	0.35
e	1.30TYP.		
k	0.20	0.25	0.30
L	0.35	0.40	0.45
All Dimensions in mm			

Suggested Pad layout



DFN2020-3	
Dim	(mm)
X	1.60
Y	2.00
b1	0.35
b2	0.45
L	0.50
Y1	1.10
k	0.15
e	1.30

单击下面可查看定价，库存，交付和生命周期等信息

[>>LRC\(乐山无线电\)](#)