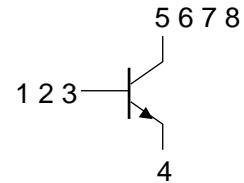
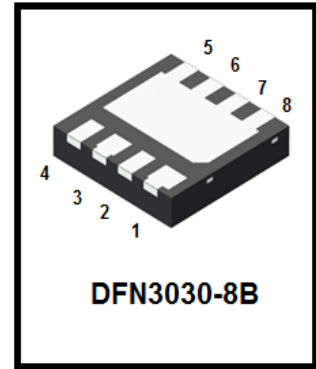


LBSS4350Q3T1G

S-LBSS4350Q3T1G

50V NPN Transistor



1. FEATURES

- We declare that the material of product are Halogen Free and compliance with RoHS requirements.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.
- Low collector-emitter saturation voltage.
- High collector current capability.
- High collector current gain.
- Higher efficiency leading to less heat generation.

2. APPLICATIONS

- Driver stages of audio and video amplifiers.

3. ORDERING INFORMATION

Device	Marking	Shipping
S-LBSS4350Q3T1G	S3	3000/Tape&Reel

4. MAXIMUM RATINGS(Ta = 25°C unless otherwise stated)

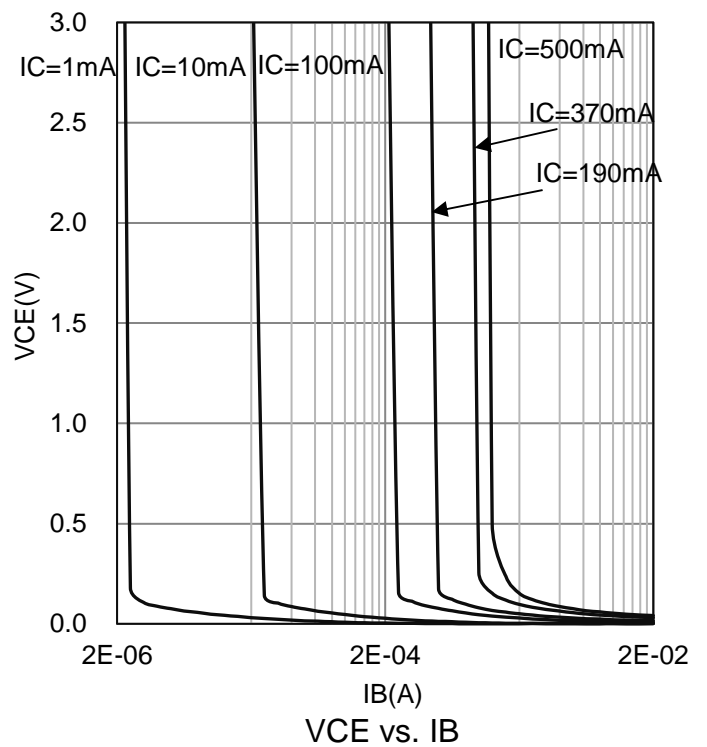
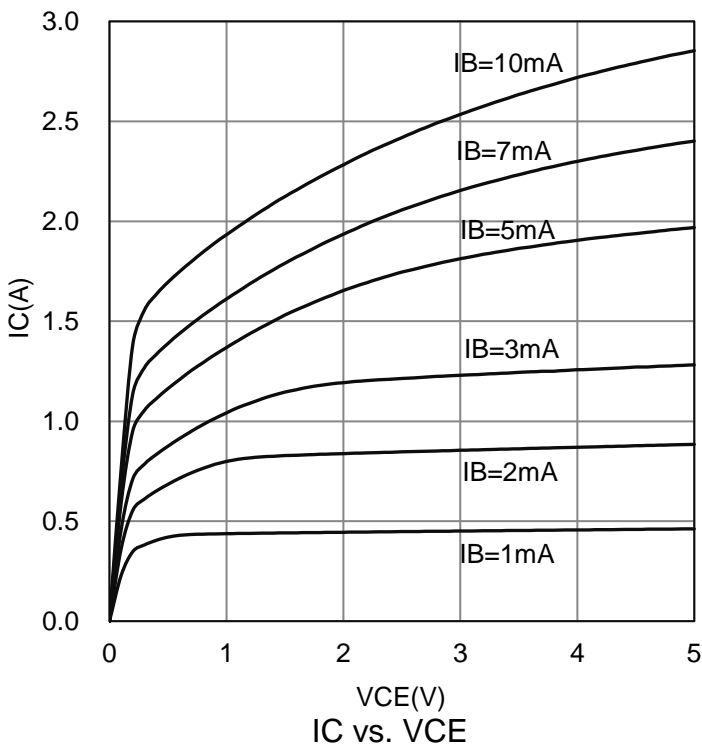
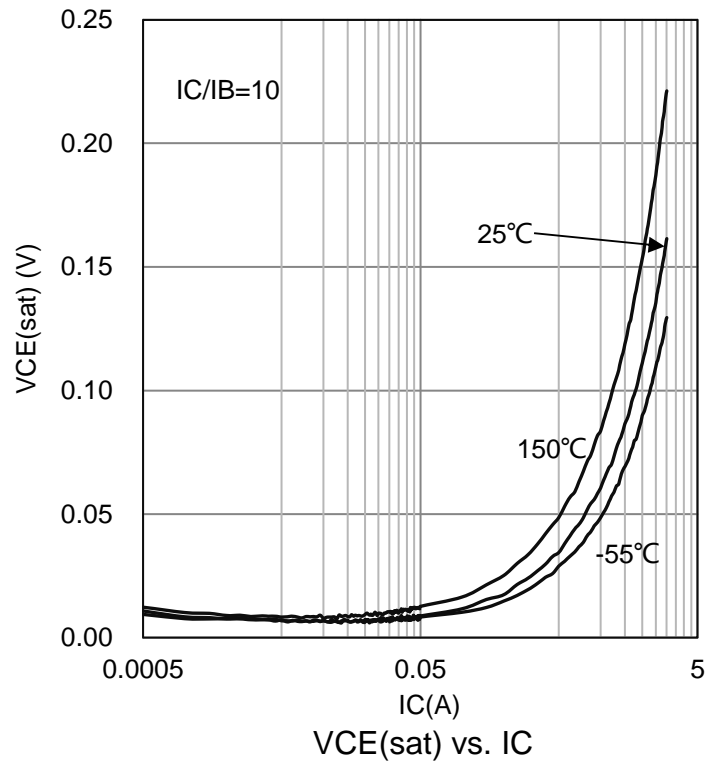
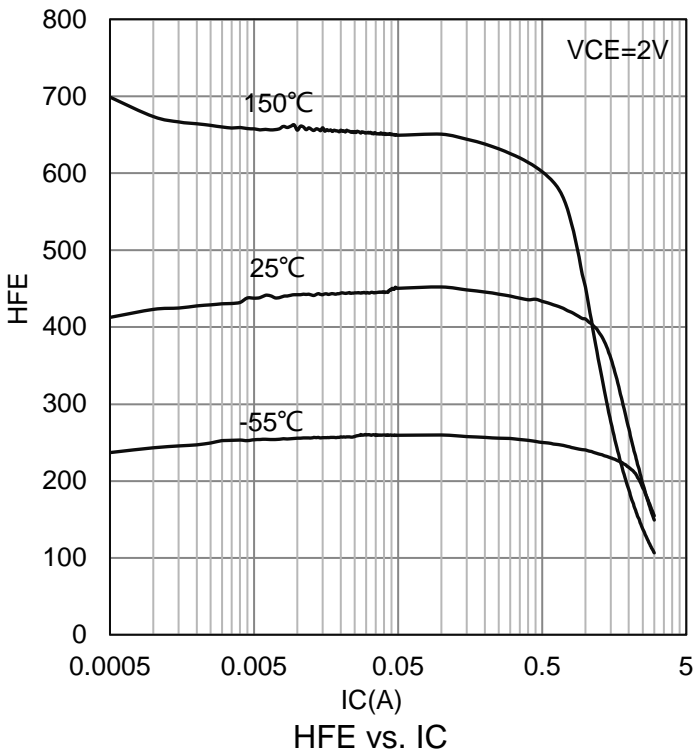
Parameter	Symbol	Limits	Unit
Collector–Emitter Voltage	VCEO	50	V
Collector–Base Voltage	VCBO	60	V
Emitter–Base Voltage	VEBO	5	V
Collector Current	IC	3	A
Base Current	IB	0.5	A
Maximum Power Dissipation	PD	2	W
Thermal Resistance-Junction to Ambient	RθJA	65	°C/W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55~+150	°C

5. ELECTRICAL CHARACTERISTICS

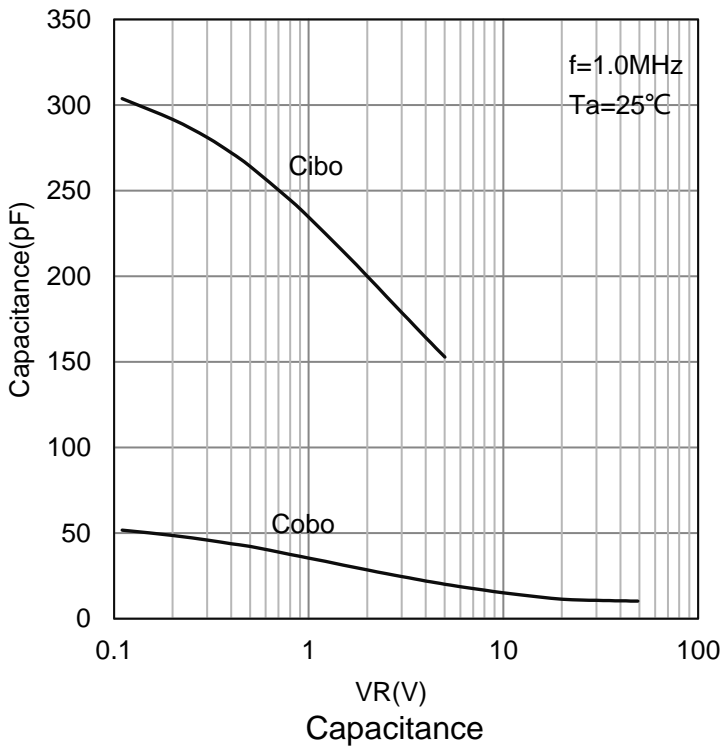
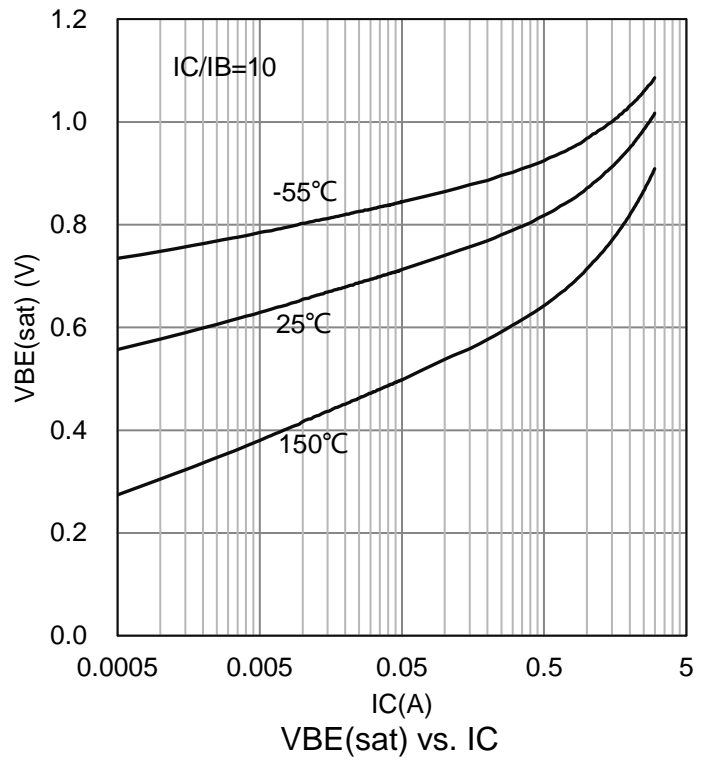
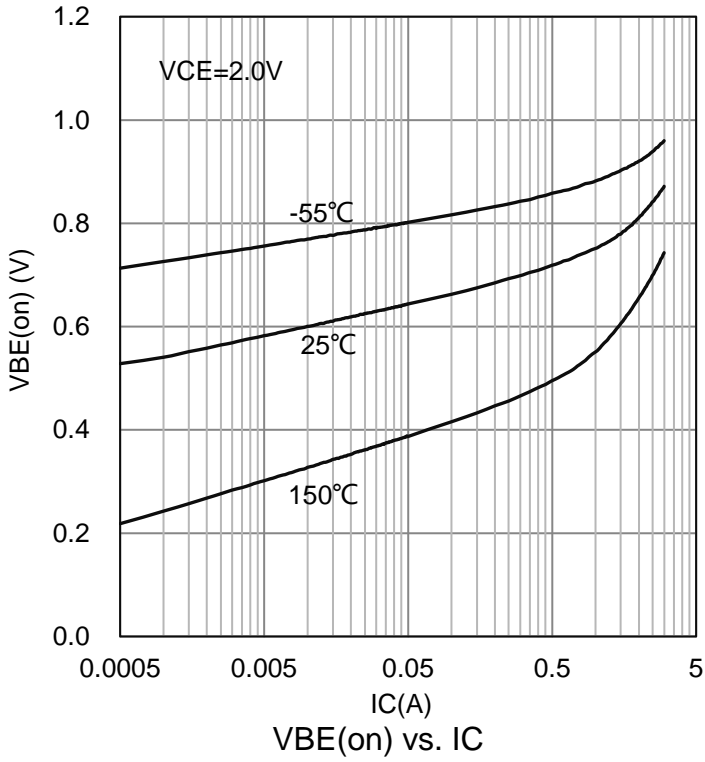
Characteristic	Symbol	Min.	Typ.	Max.	Unit
Collector–Emitter Breakdown Voltage ($I_C = 1\text{ mA}, I_B = 0$)	VBR(CEO)	50	-	-	V
Collector–Base Breakdown Voltage ($I_C = 100\text{ }\mu\text{A}, I_E = 0$)	VBR(CBO)	60	-	-	V
Emitter–Base Breakdown Voltage ($I_E = 100\text{ }\mu\text{A}, I_C = 0$)	VBR(EBO)	5	-	-	V
Collector-Base Cutoff Current ($V_{CB} = 50\text{ V}, I_E = 0$)	ICBO	-	-	100	nA
Emitter-Base Cutoff Current ($V_{EB} = 5\text{ V}, I_C = 0$)	IEBO	-	-	100	nA
Collector-Emitter cutoff Current ($V_{CE} = 50\text{ V}, I_B = 0$)	ICEO	-	-	10	μA
DC Current Gain ($V_{CE} = 2\text{ V}, I_C = 100\text{ mA}$) ($V_{CE} = 2\text{ V}, I_C = 500\text{ mA}$) ($V_{CE} = 2\text{ V}, I_C = 1\text{ A}$) ($V_{CE} = 2\text{ V}, I_C = 2\text{ A}$) ($V_{CE} = 2\text{ V}, I_C = 3\text{ A}$)	hFE	300 300 300 200 100	- - - - -	- - - - -	
Collector–Emitter Saturation Voltage ($I_C = 500\text{ mA}, I_B = 50\text{ mA}$) ($I_C = 1\text{ A}, I_B = 50\text{ mA}$) ($I_C = 2\text{ A}, I_B = 100\text{ mA}$) ($I_C = 2\text{ A}, I_B = 200\text{ mA}$) ($I_C = 3\text{ A}, I_B = 300\text{ mA}$)	VCE(sat)	- - - - -	- - - - -	80 160 280 260 370	mV
Base-emitter saturation voltage ($I_C = 2\text{ A}, I_B = 100\text{ mA}$) ($I_C = 3\text{ A}, I_B = 300\text{ mA}$)	VBE(sat)	- -	- -	1.1 1.2	V
Transition frequency ($I_C = 100\text{ mA}, V_{CE} = 5\text{ V}, f = 100\text{ MHz}$)	fT	100	-	-	MHz
Collector capacitance ($I_B = I_E = 0, V_{CB} = 10\text{ V}, f = 1\text{ MHz}$)	Cc	-	25	-	pF

1. Pulse test: $t_p \leq 300\text{ }\mu\text{s}, \delta \leq 0.02$;

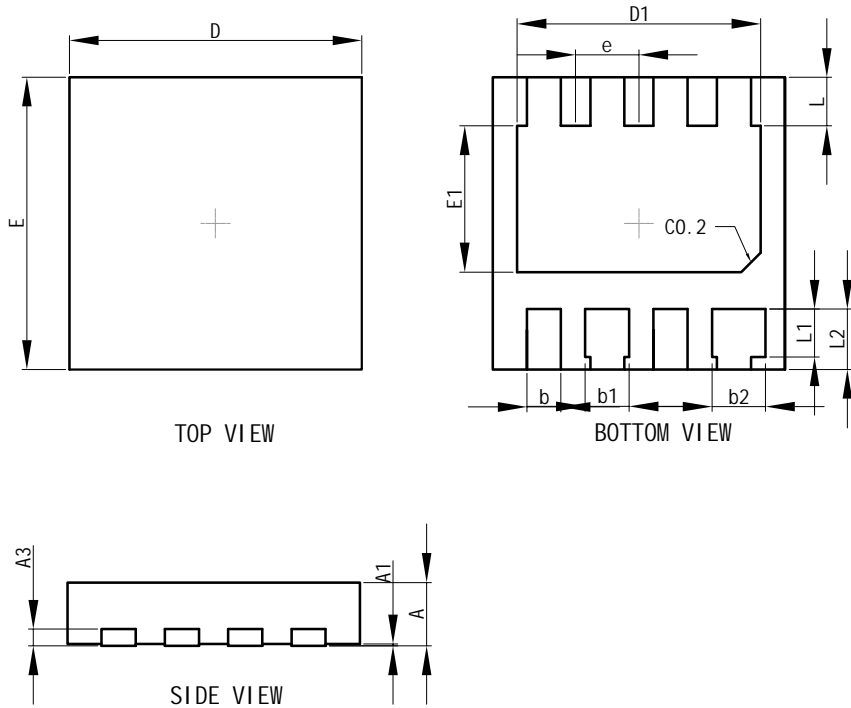
6.ELECTRICAL CHARACTERISTICS CURVES



6.ELECTRICAL CHARACTERISTICS CURVES(Con.)

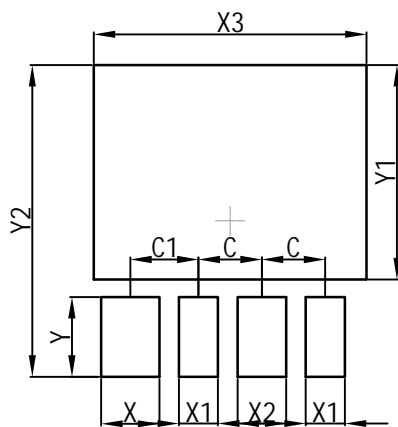


7.OUTLINE AND DIMENSIONS



DFN3030-8B			
Dim	Min	Nor	Max
A	0.60	0.65	0.70
A1	0.00	0.03	0.05
b	0.30	0.35	0.40
b1	0.40	0.45	0.50
b2	0.50	0.55	0.60
D	2.95	3.00	3.05
E	2.95	3.00	3.05
D1	2.45	2.50	2.55
E1	1.45	1.50	1.55
e	0.65BSC		
L	0.45	0.50	0.55
L1	0.44	0.49	0.54
L2	0.57	0.62	0.67
A3	0.152REF.		
All Dimensions in mm			

8.SOLDERING FOOTPRINT



DFN3030-8B	
Dim	(mm)
C	0.65
C1	0.70
X	0.60
X1	0.40
X2	0.50
X3	2.80
Y1	2.20
Y2	3.20
Y	0.82

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