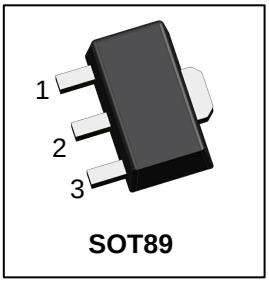
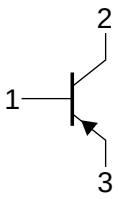
LBSS5250Y3T1G
S-LBSS5250Y3T1G

Midium Power PNP Transistors





1. FEATURES

- Low saturation voltage, typically
- High speed switching
- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.

2.APPLICATIONS

- Driver

3. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LBSS5250Y3T1G	H	1000/Tape&Reel

4. MAXIMUM RATINGS(Ta = 25ºC)

Parameter	Symbol	Limits	Unit
Collector–Emitter Voltage	VCEO	-50	V
Collector–Base Voltage	VCBO	-50	V
Emitter–Base Voltage	VEBO	-6	V
Collector Current	IC	-2	A
Collector Current(Pulse)	ICP	-4	A

5. THERMAL CHARACTERISTICS

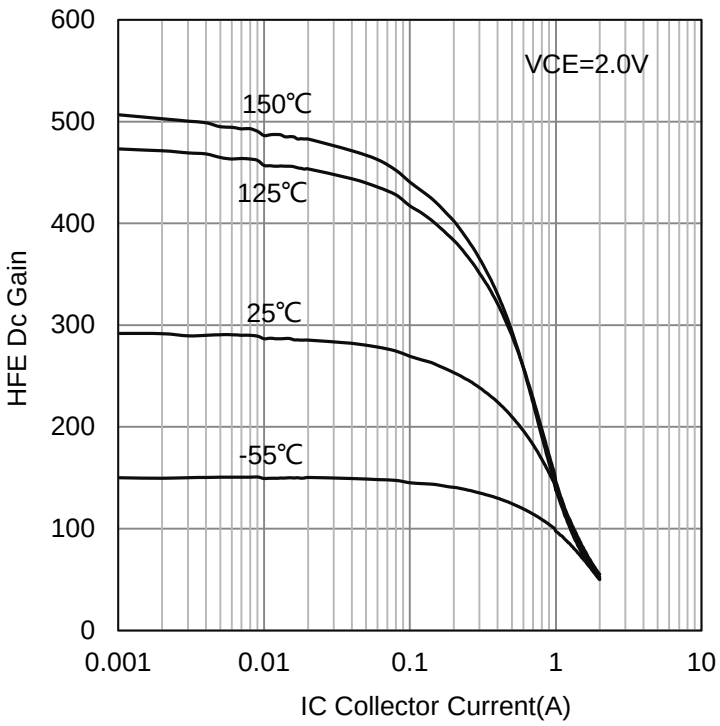
Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR−4 Board (Note 1) @ TA = 25ºC Derate above 25ºC	PD	550 4.4	mW mW/ºC
Thermal Resistance, Junction–to–Ambient	RΘJA	225	ºC/W
Junction and Storage temperature	TJ,Tstg	−55~+150	° C

1.PCB Size:30.0mm×25.0mm×1.6mm,FR-4 Board;

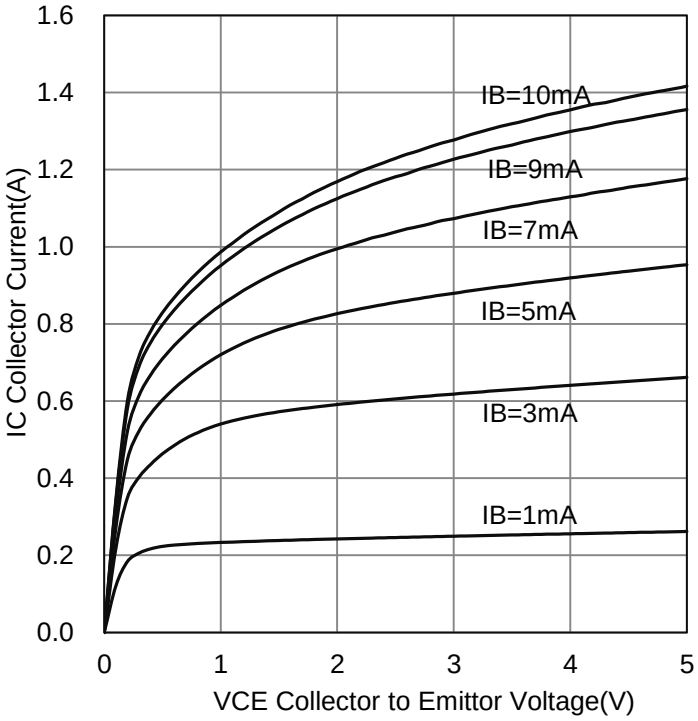
6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Collector-emitter breakdown voltage (IC = -1mA)	BVCEO	-50	-	-	V
Collector-base breakdown voltage (IC = -100μA)	BVCBO	-50	-	-	V
Emitter-base breakdown voltage (IE = -100μA)	BVEBO	-6	-	-	V
Collector Cutoff Current (VCB = -50V,IE = 0)	ICBO	-	-	-1	μA
Emitter Cut-off Current (VEB =-4V, IC =0)	IEBO	-	-	-1	μA
DC Current Gain (VCE = -2V, IC = -50mA)	HFE	180	-	450	
Collector–Emitter Saturation Voltage (IC = -700mA, IB = -35mA)	VCE(sat)	-	-200	-400	mV
Transition Frequency(Note 1) (VCE =-10V, IE =300mA, f=100MHz)	fT	-	320	-	MHz
Collector Output Capacitance (VCB =-10V, IE =0A, f=1MHz)	Cob	-	22	-	pF

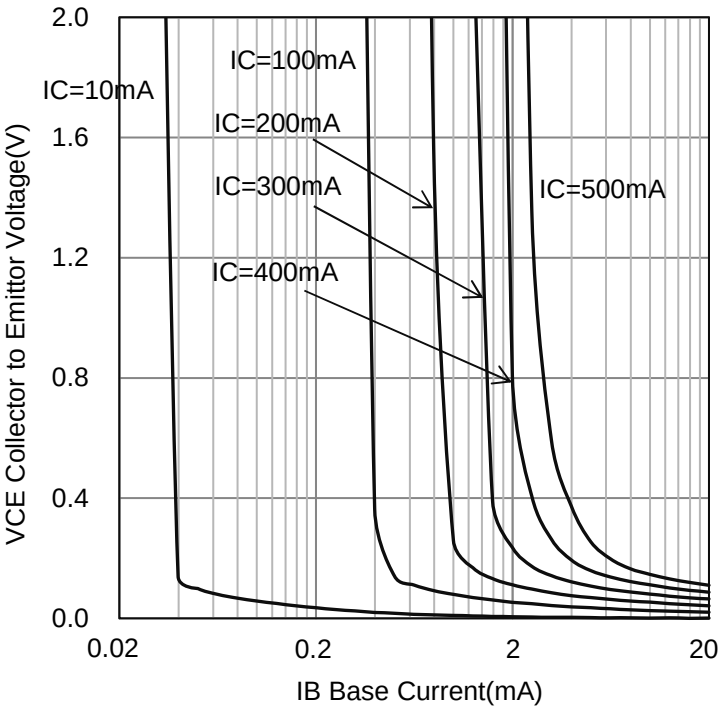
7.ELECTRICAL CHARACTERISTICS CURVES



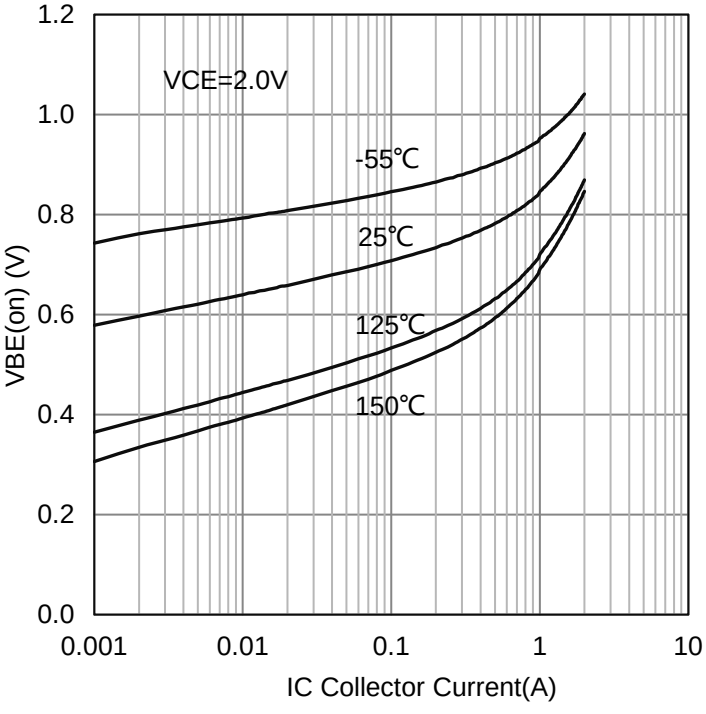
HFE vs. IC



IC vs. VCE

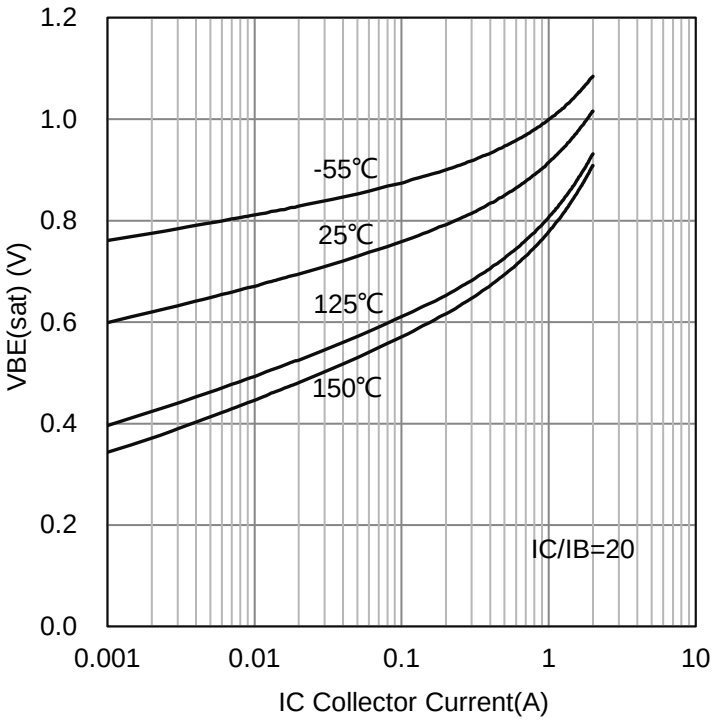


VCE vs. IB

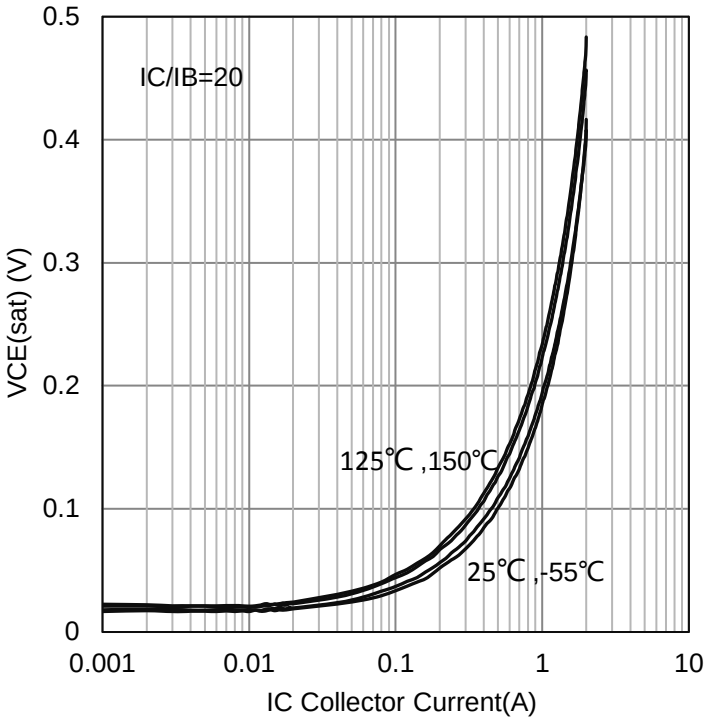


VBE(on) vs. IC

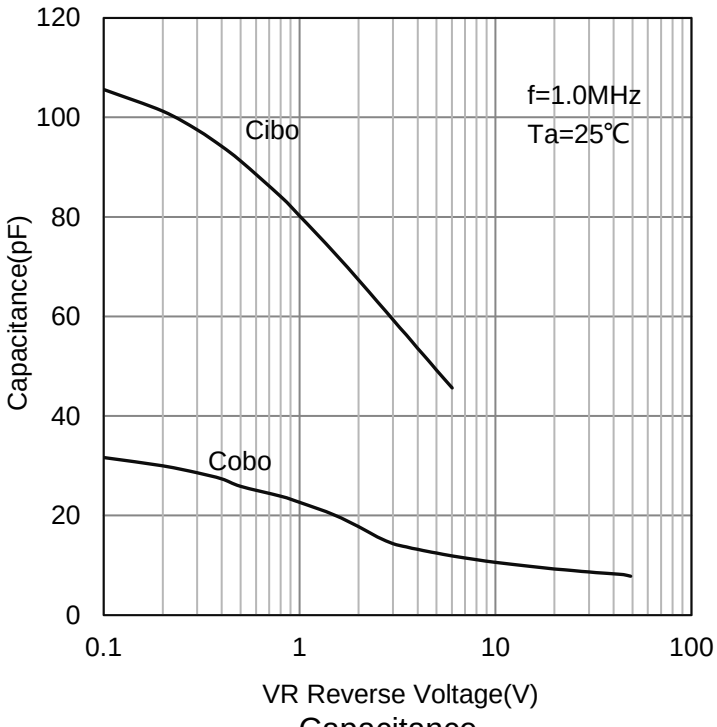
7.ELECTRICAL CHARACTERISTICS CURVES(Con.)



VBE(sat) vs. IC

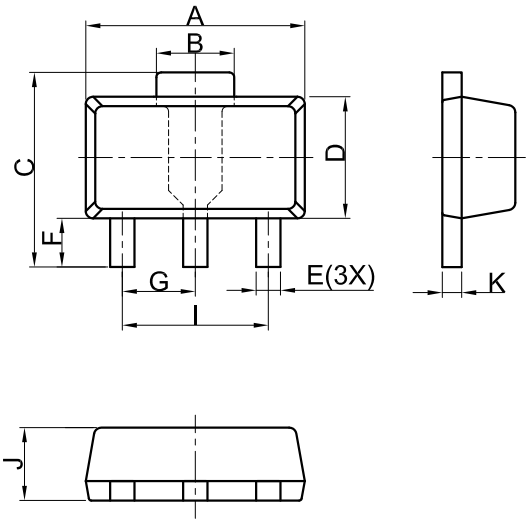


VCE(sat) vs. IC



Capacitance

8.OUTLINE AND DIMENSIONS

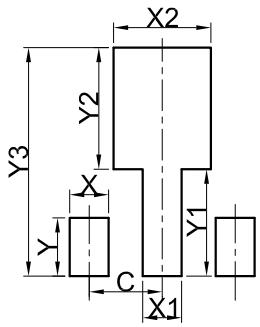


SOT89			
DIM	MIN	NOR	MAX
A	4.30	4.50	4.70
B	1.40	1.60	1.80
C	3.90	4.00	4.25
D	2.30	2.50	2.70
E	0.40	0.50	0.58
F	0.90	1.00	1.20
G	1.50 BSC		
I	3.00 BSC		
J	1.40	1.50	1.60
K	0.34	0.40	0.50
All Dimensions in mm			

GENERAL NOTES

1. Top package surface finish Ra0.4±0.2um
2. Bottom package surface finish Ra0.7±0.2um
3. Side package surface finish Ra0.4±0.2um
4. Protrusion or Gate Burrs shall not exceed 0.10mm per side.

9.SOLDERING FOOTPRINT



SOT89	
DIM	(mm)
X	0.80
Y	1.20
X1	0.80
Y1	2.20
X2	2.00
Y2	2.50
C	1.50
Y3	4.70

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