SSCN2050GTB

Silicon NPN Darlington Power Transistor

➢ Description

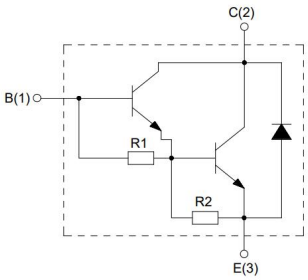
- Low Collector Saturation Voltage
- High DC Current Gain
- High Reliability

➢ Applications

- Audio power amplifiers
- Relay & solenoid drivers
- Motor controls
- General purpose power amplifiers

➢ Pin configuration

TO-262-3L



Circuit Diagram

➢ Ordering Information

Device	Package	Shipping
SSCN2050GTB	TO-262-3L	50/Tube

➢ Marking Information

Marking	Designator	Description
SSC2050 YW	SSC	Logo
	2050	Product model
	YW	Y: year:23 W: week:01~52

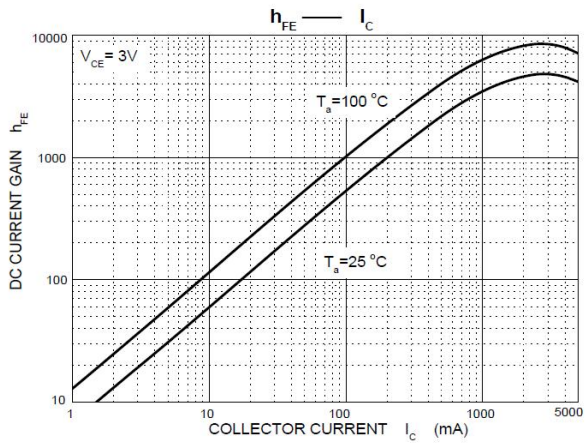
➢ Absolute Maximum Ratings(T_A=25℃ unless otherwise noted)

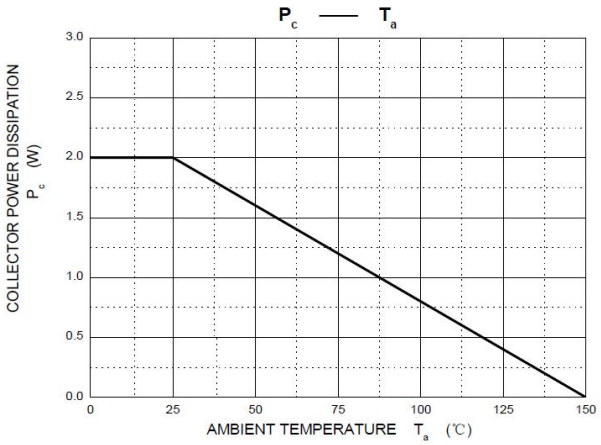
Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	150	V
Collector- Emitter Voltage	V_{CEO}	100	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current-Continuous	I_C	10	A
Collector Power Dissipation	P_C	2	W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	-55 to 150	℃

➢ Electrical Characteristics (T_A=25℃ unless otherwise noted)

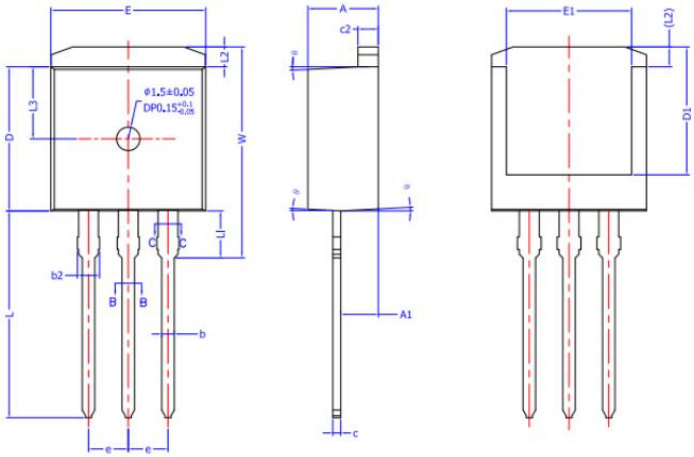
Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	I_C = 1mA, I_E = 0	150			V
Collector-emitter Breakdown Voltage	BV_{CEO}	I_C = 1mA, I_B = 0	100			V
Collector Cutoff Current	I_{CBO}	V_{CB} = 150V, I_E = 0			10	μA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 7V, I_C = 0			100	mA
DC Current Gain	h_{FE}	V_{CE} = 5V, I_C = 2A	2000			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 4A, I_B = 16mA			2	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C = 4A, I_B = 16mA			2.5	V

➢ Typical Performance Characteristics (T_A=25℃ unless otherwise noted)



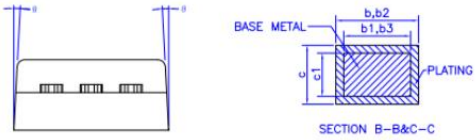


➢ Package Information



COMMON DIMENSIONS
(UNITS OF MEASURE =MILLIMETER)

SYMBOL	MIN	NOM	MAX
A	4.40	4.50	4.60
A1	2.20	2.40	2.60
b	0.76	---	0.89
b1	0.75	0.80	0.85
b2	1.23	---	1.37
b3	1.22	1.27	1.32
c	0.47	---	0.60
c1	0.46	0.51	0.56
c2	1.25	1.30	1.35
D	9.10	9.20	9.30
D1	8.00	---	---
E	9.80	9.90	10.00
E1	7.80	---	---
e	2.54 BSC		
L	12.90	13.20	13.50
L1	2.80	3.00	3.20
L2	1.17	1.27	1.40
L3	4.60 REF		
W	13.25	---	14.00
θ	1°	3°	5°



NOTES:
ALL DIMENSIONS REFER TO JEDEC STANDARD TO-262 AA
DO NOT INCLUDE MOLD FLASH OR PROTRUSIONS.

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