



SSCN2050GTB

Silicon NPN Darlington Power Transistor

➤ Description

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

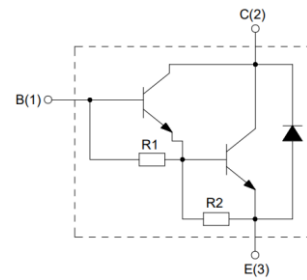
➤ Applications

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

➤ Ordering Information

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

➤ Pin configuration



Circuit Diagram

➤ Marking Information

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



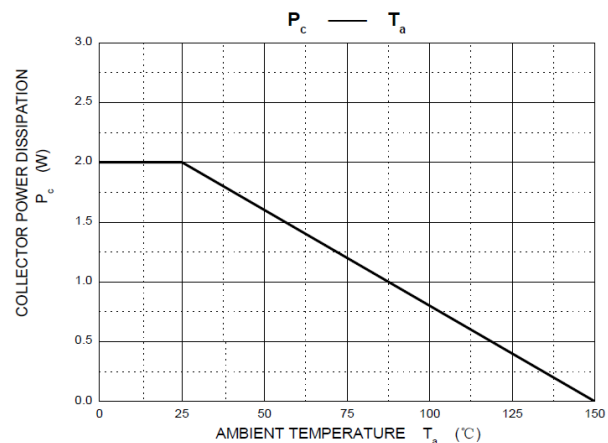
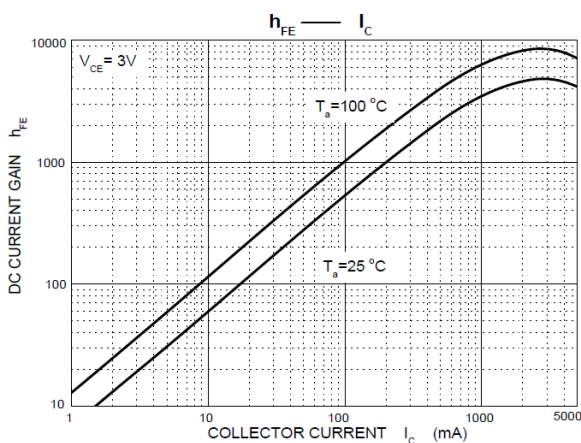
➤ **Absolute Maximum Ratings**($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CB0}	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	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 to 150	$^\circ\text{C}$

➤ **Electrical Characteristics** ($T_A=25^\circ\text{C}$ unless otherwise noted)

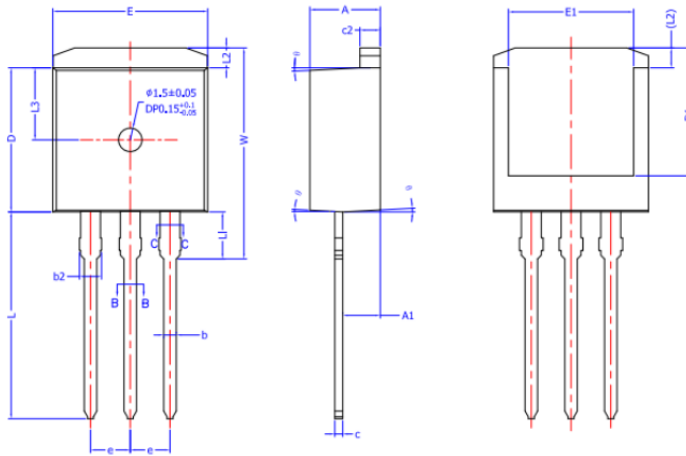
Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	BV_{CB0}	$I_C = 1\text{mA}, I_E = 0$	150			V
Collector-emitter Breakdown Voltage	BV_{CEO}	$I_C = 1\text{mA}, I_B = 0$	100			V
Collector Cutoff Current	I_{CB0}	$V_{CB} = 150\text{V}, I_E = 0$			10	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 7\text{V}, I_C = 0$			100	mA
DC Current Gain	h_{FE}	$V_{CE} = 5\text{V}, I_C = 2\text{A}$	2000			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 4\text{A}, I_B = 16\text{mA}$			2	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 4\text{A}, I_B = 16\text{mA}$			2.5	V

➤ **Typical Performance Characteristics** ($T_A=25^\circ\text{C}$ unless otherwise noted)



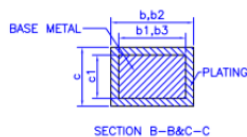
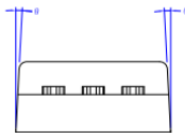


➤ Package Information



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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