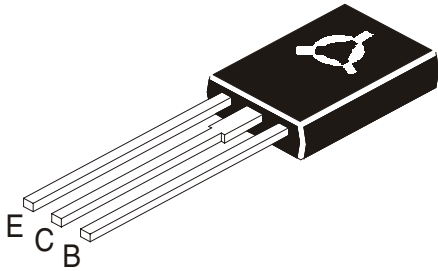


NPN EPITAXIAL SILICON POWER TRANSISTORS

2N5191
2N5192

TO126
Plastic Package



Use in Medium Power Linear and Switching Applications

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	2N5191	2N5192	UNIT
Collector -Base Voltage	V_{CBO}	60	80	V
Collector -Emitter Voltage	V_{CEO}	60	80	V
Emitter Base Voltage	V_{EBO}	5		V
Collector Current	I_C	4		A
Collector Peak Current	I_{CM}	7		A
Base Current	I_B	1		A
Total Dissipation @ $T_C < 25^\circ\text{C}$	P_{tot}	40		W
Junction Temperature	T_j	150		$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-65 to 150		$^\circ\text{C}$
Thermal Resistance				
Junction to Case	$R_{th(j-c)}$	3.12		$^\circ\text{C/W}$
Junction to Ambient	$R_{th(j-a)}$	100		$^\circ\text{C/W}$

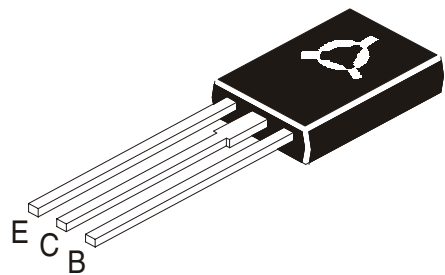
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$ unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT	
Collector Emitter Sustaining Voltage	$V_{CEO(sus)}$	$I_C = 100\text{mA}, I_B = 0$	2N5191	60	-	-	V
			2N5192	80	-	-	V
Collector Cut off Current	I_{CBO}	$V_{CB} = \text{rated } V_{CBO}, I_E = 0$	-	-	0.1	mA	
	I_{CEX}	$V_{CE} = \text{rated } V_{CEO}, V_{BE} = 1.5\text{V}$	-	-	0.1	mA	
		$V_{CE} = \text{rated } V_{CEO}, V_{BE} = 1.5\text{V}, T_C = 125^\circ\text{C}$	-	-	2	mA	
Emitter Cut off Current	I_{CEO}	$V_{CE} = \text{rated } V_{CEO}, I_B = 0$	-	-	1	mA	
	I_{EBO}	$V_{EB} = 5\text{V}, I_C = 0$	-	-	1	mA	
Collector Emitter Saturation Voltage	$V_{CE(sat)}$ *	$I_C = 1.5\text{A}, I_B = 0.15\text{A}$	-	-	0.6	V	
		$I_C = 4\text{A}, I_B = 1\text{A}$	-	-	1.4	V	
Base Emitter Voltage	V_{BE} *	$I_C = 1.5\text{A}, V_{CE} = 2\text{V}$	-	-	1.2	V	

NPN EPITAXIAL SILICON POWER TRANSISTORS

2N5191
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TO126
Plastic Package



ELECTRICAL CHARACTERISTICS (Ta=25°C unless specified otherwise)

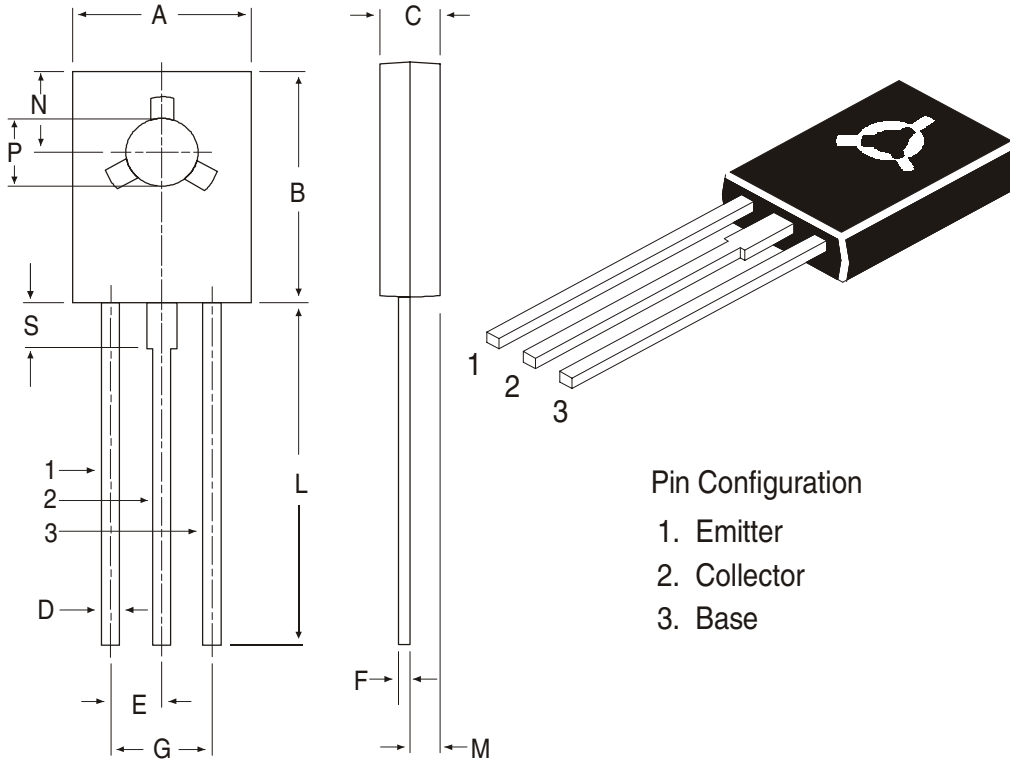
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
DC Current Gain	h_{FE}	$I_C=1.5A, V_{CE}=2V$	2N5191	25	-	100
			2N5192	20	-	80
		$I_C=4A, V_{CE}=2V$	2N5191	10	-	-
			2N5192	7	-	-
Transition frequency	f_T	$I_C=1A, V_{CE}=10V$	2	-	-	MHz

*Pulsed Pulse Duration=300μs, Duty Cycle=1.5%

2N5191
2N5192

TO126
Plastic Package

TO-126 (SOT-32) Plastic Package



DIM	MIN	MAX
A	7.4	7.8
B	10.5	10.8
C	2.4	2.7
D	0.7	0.9
E	2.25 TYP.	
F	0.49	0.75
G	4.5 TYP.	
L	15.7 TYP.	
M	1.27 TYP.	
N	3.75 TYP.	
P	3.0	3.2
S	2.5 TYP.	

All dimensions in mm.

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-126 Bulk	500 pcs/polybag	340 gm/500 pcs	3" x 7.5" x 7.5"	2K	17" x 15" x 13.5"	32K	31 kgs
TO-126 Tube	50 pcs/tube	73 gm/50 pcs	3" x 3.7" x 21.5"	1K	19" x 19" x 19"	10K	15 kgs

Disclaimer

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