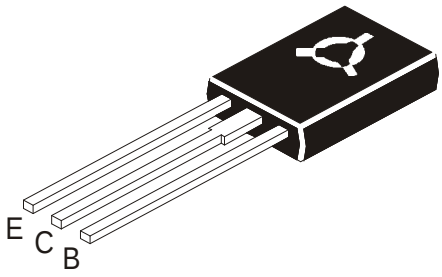
PNP EPITAXIAL SILICON POWER TRANSISTORS

2N5193, 2N5194
2N5195

TO126
Plastic Package



Use in Medium Power Amplifier and Switching Applications.

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	2N5193	2N5194	2N5195	UNIT
Collector Base Voltage	V_{CBO}	40	60	80	V
Collector Emitter Voltage	V_{CEO}	40	60	80	V
Emitter Base Voltage	V_{EBO}	5			V
Collector Current Continuous	I_C	4			A
Collector Peak Current	I_{CM}	7			A
Base Current	I_B	1			A
Power Dissipation at T_C=25ºC	P_D	40			W
Operating and Storage Junction Temperature	T_j, T_{stg}	- 65 to +150			ºC

Thermal Resistance

Junction to Case	$R_{th\ (j-c)}$	3.12	ºC/W

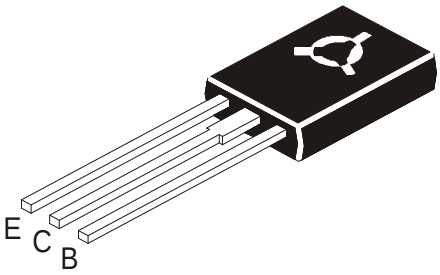
ELECTRICAL CHARACTERISTICS (T_c=25º C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Cut Off Current	I_{CBO}	V_{CB}=rated V_{CB}			100	µA
	I_{CEV}	V_{CE}=rated V_{CEO}, V_{EB}=1.5V			100	µA
	I_{CEO}	V_{CE}=rated V_{CEO}			1	mA
Emitter Cut Off Current	I_{EBO}	V_{EB}=5V, I_C=0			1	mA
Collector Emitter Sustaining Voltage	*$V_{CEO\ (sus)}$	I_C=100mA, I_B=0				
		2N5193	40			V
		2N5194	60			V
		2N5195	80			V
Collector Emitter Saturation Voltage	*$V_{CE\ (sat)}$	I_C=1.5A, I_B=0.15A			0.6	V
		I_C=4A, I_B=1A			1.2	V
Base Emitter Voltage	*V_{BE}	I_C=1.5A, V_{CE}=2V			1.2	V

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

PNP EPITAXIAL SILICON POWER TRANSISTORS

2N5193, 2N5194
2N5195



TO126
Plastic Package

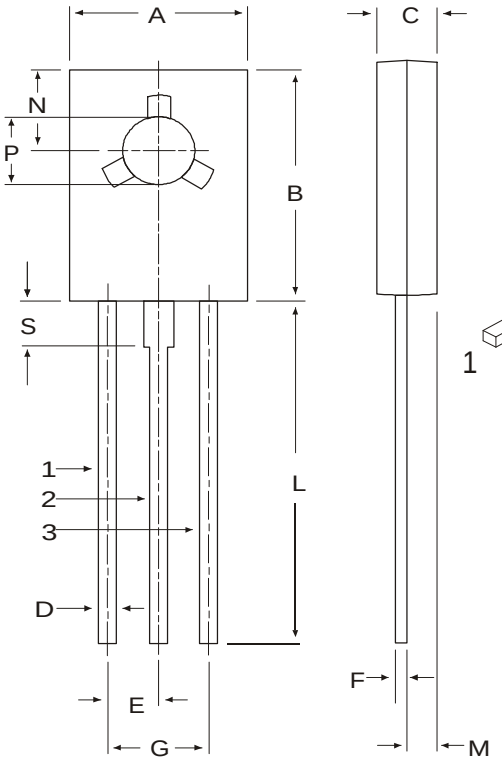
ELECTRICAL CHARACTERISTICS (T_a=25° C unless specified otherwise)

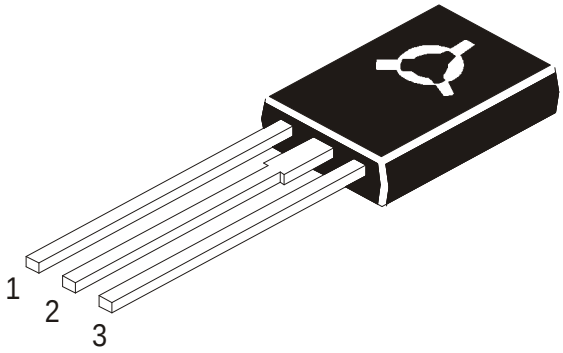
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
DC Current Gain	*h_{FE}	I_C=1.5A, V_{CE}=2V				
		2N5193/2N5194	25		100	
		2N5195	20		120	
		I_C=4A, V_{CE}=2V				
		2N5193	10		80	
		2N5194	10			
		2N5195	7			
Transition frequency	f_T	I_C=1A, V_{CE}=10V, f=1MHz	2			MHz

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

2N5193-95_TME Rev03_01072025M

TO-126 (SOT-32) Plastic Package





Pin Configuration

1. Emitter
2. Collector
3. Base

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 diminsions 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

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.

2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Disclaimer

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