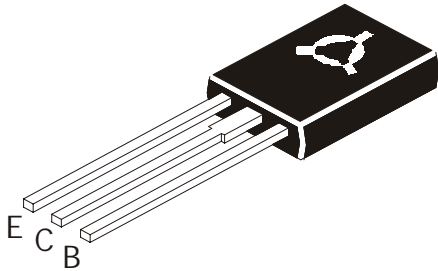


**NPN PLASTIC POWER TRANSISTORS**

**BF457, 458, 459**



**TO126  
Plastic Package**

**Video Output Stages of TV Sets , for AF Output Stages with a High Operating Voltage and as Driver Transistors in Horizontal Deflection Circuit Applications.**

**ABSOLUTE MAXIMUM RATINGS (Ta=25°C unless specified otherwise)**

DESCRIPTION	SYMBOL	457	458	459	UNITS
Collector Base Voltage(open emitter)	$V_{CBO}$	>160	>250	>300	V
Collector Emitter Voltage (open base)	$V_{CEO}$	>160	>250	>300	V
Emitter Base Voltage(open collector)	$V_{EBO}$		>5.0		V
Collector Current	$I_C$		<100		mA
Collector current (Peak Value)	$I_{CM}$		<300		mA
Base Current	$I_B$		<50		mA
Total Power Dissipation@ Tc=45°C	$P_{tot}$		<10		W
Total Power Dissipation@ Ta=25°C	$P_{tot}$		<1.2		W
Junction Temperature	$T_j$		<150		°C
Storage Temperature	$T_{stg}$		-65 to +150		°C

**THERMAL RESISTANCE**

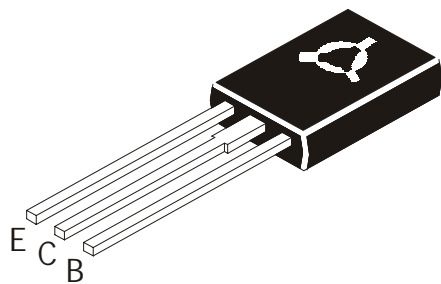
From Junction to case	$R_{th(j-c)}$		10		K/W
From Junction to ambient	$R_{th(j-a)}$		104		K/W

**ELECTRICAL CHARACTERISTICS (Ta=25°C Unless Otherwise Specified)**

DESCRIPTION	SYMBOL	457	458	459	UNITS
Collector-Cut off Current	$I_{CBO}$ $I_E = 0, V_{CB} = 100V$	<50			nA
	$I_{CBO}$ $I_E = 0, V_{CB} = 200V$		<50		nA
	$I_{CBO}$ $I_E = 0, V_{CB} = 250V$			<50	nA
Emitter cut off Current	$I_{EBO}$ $V_{EB} = 3V, I_C = 0$		<50		nA
Breakdown Voltages	$V_{CEO}$ $I_C = 10mA, I_B = 0$	>160	>250	>300	V
	$V_{CBO}$ $I_C = 100\mu A, I_E = 0$	>160	>250	>300	V
	$V_{EBO}$ $I_C = 0, I_E = 1mA$		>5.0		V
Saturation Voltage	$V_{CE(sat)}$ $I_C = 30A, I_B = 6mA$		<1.0		V

# NPN PLASTIC POWER TRANSISTORS

BF457, 458, 459

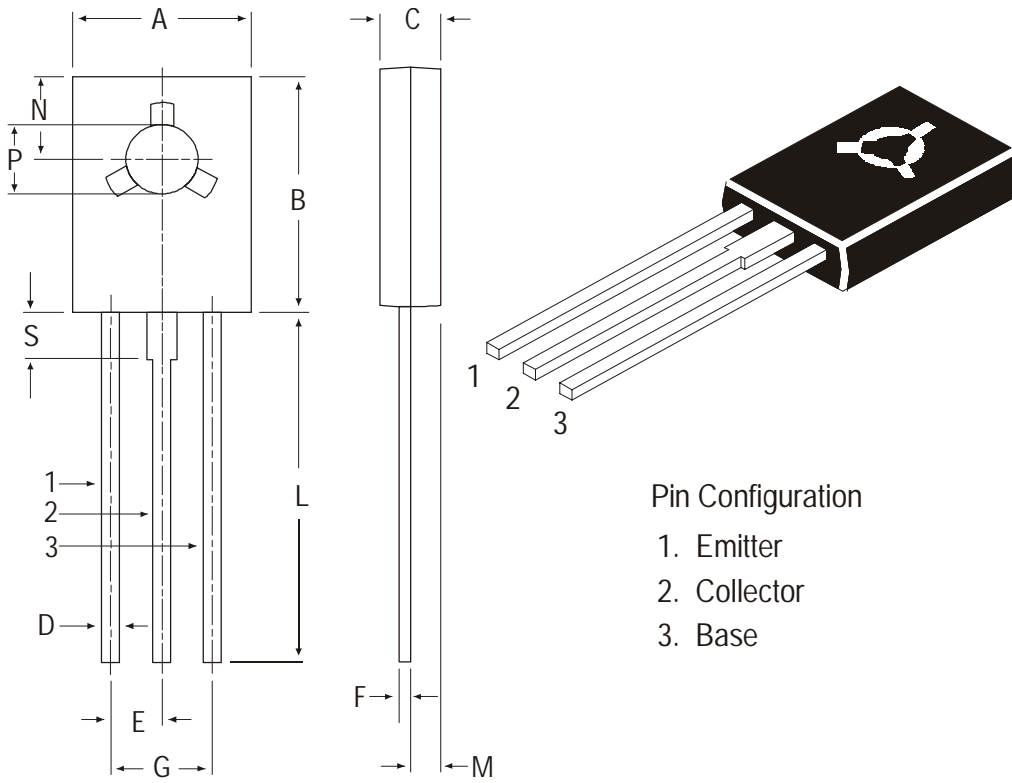


TO126  
Plastic Package

DESCRIPTION	SYMBOL		457	458	459	UNITS
Saturation Voltage	$V_{CE(sat)}$	$I_C=30A, I_B=6mA$		<1.0		V
DC Current Gain	$h_{FE}$	$I_C=30mA, V_{CE}=10V$		>25		
Output capacitance at f=1MHz	$C_O$	$I_E=0, V_{CB}=30V$	Typ	5.5		pF
Transition Frequency f =20 MHz	$f_T$	$I_C=15mA, V_{CE}=10V$	Typ	90		MHz
Feedback Capacitance f=1MHz	$C_{re}$	$I_C=1mA, V_{CE}=30V$	Typ	4.2		pF

**TO126  
Plastic Package**

**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

### **Disclaimer**

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