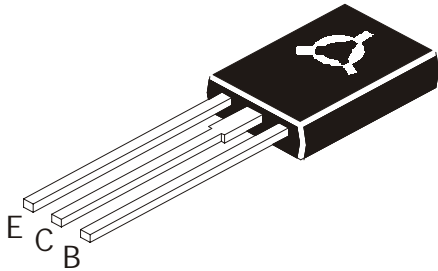


NPN PLASTIC POWER TRANSISTORS

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

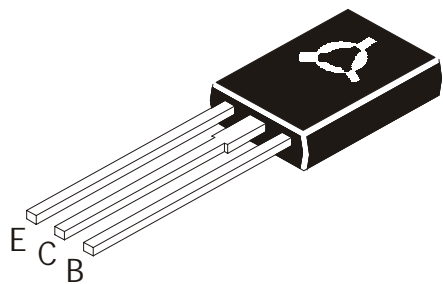
ELECTRICAL CHARACTERISTICS (Ta=25°C Unless Otherwise Specified)

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

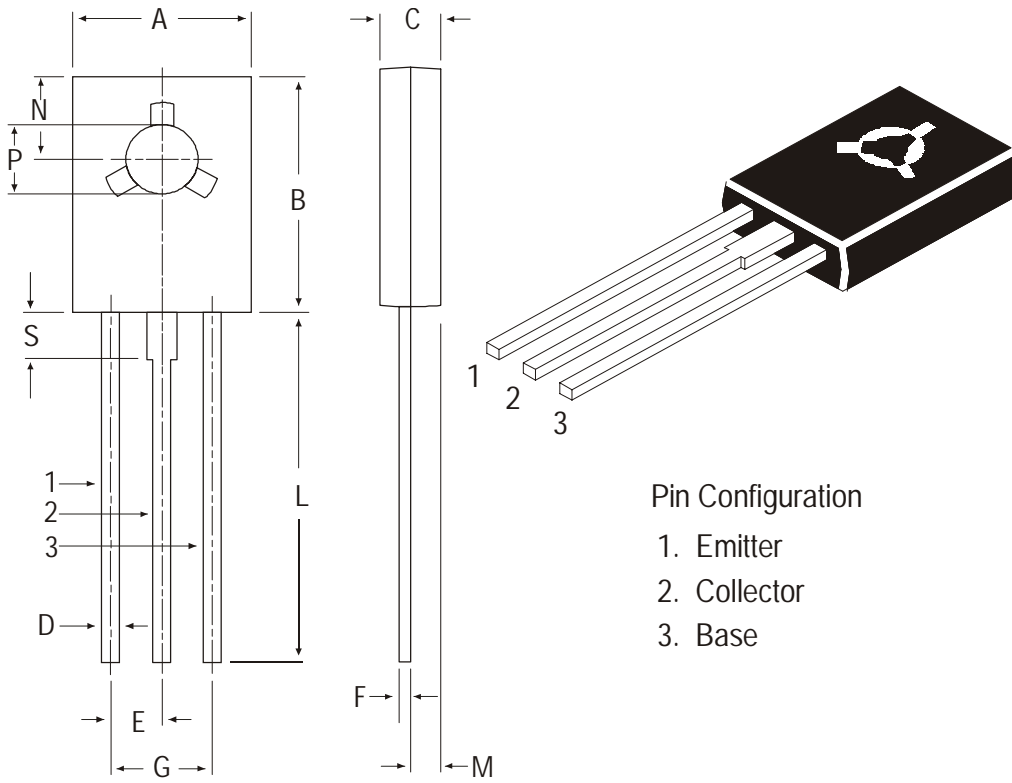
TO126
Plastic Package



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 $f \approx 20 MHz$	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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