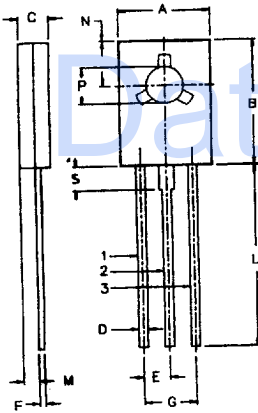
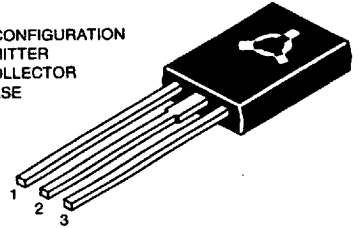


BD157, 158 NPN PLASTIC POWER TRANSISTORS
 Low Power Fast Switching, Output Stages for TV Radio and
 Audio Output Amplifiers

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 DIMENSIONS IN MM

ABSOLUTE MAXIMUM RATINGS

		157	158
Collector-base voltage (open emitter)	V _{CBO}	max. 275	325 V
Collector-emitter voltage (open base)	V _{CEO}	max. 250	300 V
Collector current	I _C	max.	0.5 A
Total power dissipation up to T _C = 25°C	P _{tot}	max.	20 W
Junction temperature	T _j	max.	150 °C
D.C. current gain	h _{FE}	min.	30
I _C = 50 mA; V _{CE} = 10 V		max.	240

RATINGS (at T_A=25°C unless otherwise specified)

Limiting values		157	158
Collector-base voltage (open emitter)	V _{CBO}	max. 275	325 V
Collector-emitter voltage (open base)	V _{CEO}	max. 250	300 V
Emitter-base voltage (open collector)	V _{EBO}	max.	5.0 V
Collector current	I _C	max.	0.5 A

Collector current (Peak)	I_{CM}	max.	1.0	A
Base current	I_B	max.	0.25	A
Total power dissipation up to $T_C = 25^\circ\text{C}$	P_{tot}	max.	20	W
Derate above 25°C		max.	0.16	W/ $^\circ\text{C}$
Junction temperature	T_j	max.	150	$^\circ\text{C}$
Storage temperature	T_{stg}		-65 to +150	$^\circ\text{C}$

THERMAL RESISTANCE

From junction to case	$R_{th\ j-c}$		6.25	$^\circ\text{C}/\text{W}$
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CHARACTERISTICS

$T_{amb} = 25^\circ\text{C}$ unless otherwise specified

			157	158
Collector cutoff current $V_{CB} = \text{rated } V_{CBO}; I_E = 0$	I_{CBO}	max.	100	μA
Emitter cut-off current $I_C = 0; V_{EB} = 5\text{V}$	I_{EBO}	max.	100	μA
Breakdown voltages $I_C = 1\text{ mA}; I_B = 0$	V_{CEO}^*	min.	250	300 V
$I_C = 1\text{ mA}; I_E = 0$	V_{CBO}	min.	275	325 V
$I_E = 1\text{ mA}; I_C = 0$	V_{EBO}	min.	5	V
D.C. current gain $I_C = 50\text{ mA}; V_{CE} = 10\text{ V}$	h_{FE}^*	min.	30	
		max.	240	

* Pulsed: pulse duration = 300 μs , duty cycle = 1.5%