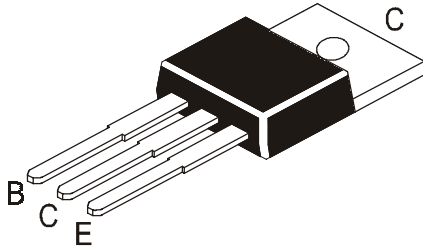


**PLASTIC POWER TRANSISTORS**

**BD 905, 907, 909, 911 NPN**  
**BD906, 908, 910, 912 PNP**



**TO-220**  
**Plastic Package**

**Power Linear and Switching Applications**

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

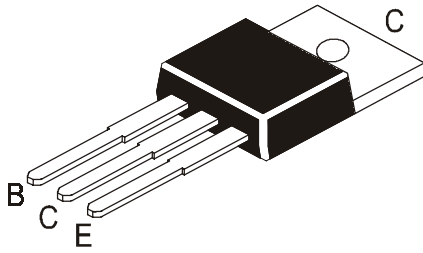
DESCRIPTION	SYMBOL	905	907	909	911	UNIT
		906	908	910	912	
Collector -Emitter Voltage	$V_{CEO}$	45	60	80	100	V
Collector -Base Voltage	$V_{CBO}$	45	60	80	100	V
Emitter -Base Voltage	$V_{EBO}$			5.0		V
Emitter and Collector Current	$I_E, I_C$			15		A
Base Current	$I_B$			5.0		A
Total Power Dissipation up to Tc=25°C	$P_{tot}$			90		W
Junction Temperature	$T_j$			150		°C
Temperature Range	$T_{stg}$			-65 to +150		°C

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

DESCRIPTION	SYMBOL	905	907	909	911	UNIT	
		906	908	910	912		
Breakdown (sus) Voltage	$V_{CEO(sus)}$ * $I_C=50mA, I_B=0$	45	60	80	100	V	
Collector-Cut off Current	$I_{CEO}$ $V_{CE}=30V, I_B=0$ $V_{CE}=40V, I_B=0$ $V_{CE}=50V, I_B=0$	1.0	1.0			mA	
					1.0		mA
						1.0	mA
	$I_{CBO}$ $I_E=0, V_{CB}=\text{Rated}$ $V_{CBO}, I_E=0, V_{CB}=\text{Rated}$ $V_{CBO}, T_c=150^\circ C$			0.5		mA	
Emitter-Cut off Current	$I_{EBO}$ $V_{EB}=5V, I_C=0$			1.0		mA	
Saturation Voltages	$V_{CE(sat)}$ * $I_C=5A, I_B=0.5A$ $I_C=10A, I_B=2.5A$			1.0		V	
				3.0		V	
	$V_{BE(sat)}$ * $I_C=10A, I_B=2.5A$			2.5		V	

# PLASTIC POWER TRANSISTORS

BD 905, 907, 909, 911 NPN  
BD906, 908, 910, 912 PNP



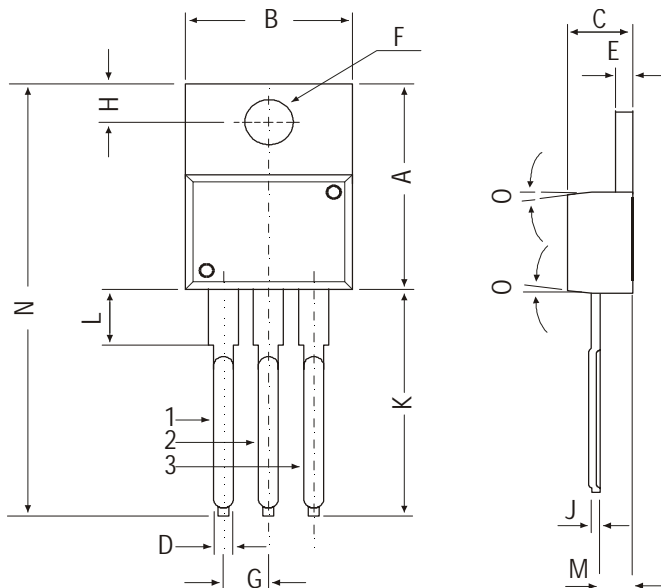
TO-220  
Plastic Package

DESCRIPTION	SYMBOL	905	907	909	911	UNIT
		906	908	910	912	
Base Emitter on Voltage	$V_{BE(on)}^*$	$I_C=5A, V_{CE}=4V,$		1.5		V
DC Current Gain	$h_{FE}^*$	$I_C=0.5A, V_{CE}=4V$		40-250		
		$I_C=5A, V_{CE}=4V$		15-150		
		$I_C=10A, V_{CE}=4V$		>5		
Transition Frequency	$f_T$	$V_{CE}=4V, I_C=0.5A,$		>3.0		MHZ

\*Pulse Test:- Pulse Width<300 $\mu$ s, Duty Cycle=1.5%

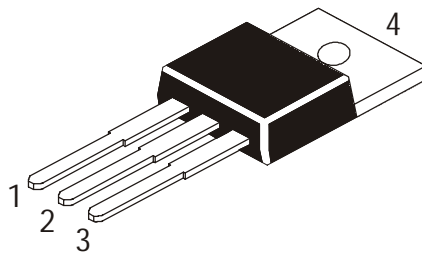
**TO-220  
Plastic Package**

**TO-220 Plastic Package**



DIM	MIN	MAX
A	14.42	16.51
B	9.63	10.67
C	3.56	4.83
D	—	0.90
E	1.15	1.50
F	3.53	4.10
G	2.29	2.79
H	2.54	3.43
J	0.36	0.61
K	12.70	14.73
L	2.80	6.35
M	2.00	2.92
N	—	31.24
O	7 DEG	

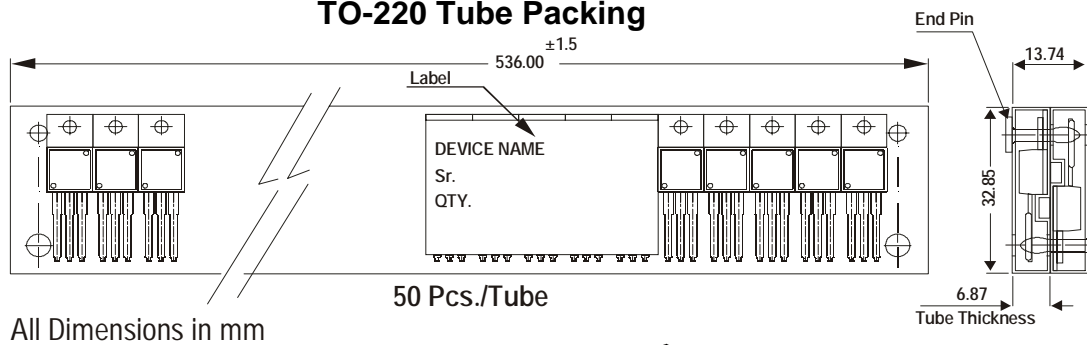
All dimensions in mm.



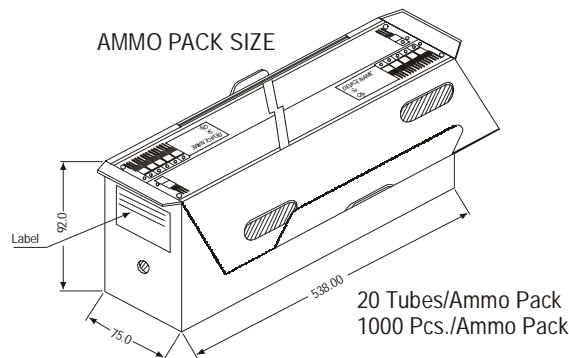
**Pin Configuration**

1. Base
2. Collector
3. Emitter
4. Collector

**TO-220 Tube Packing**



**AMMO PACK SIZE**



**Packing Detail**

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-220	200 pcs/polybag	396 gm/200 pcs	3" x 7.5" x 7.5"	1K	17" x 15" x 13.5"	16K	36 kgs
	50 pcs/tube	135 gm/50 pcs	3.5" x 3.7" x 21.5"	1K	19" x 19" x 19"	10K	28 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).

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