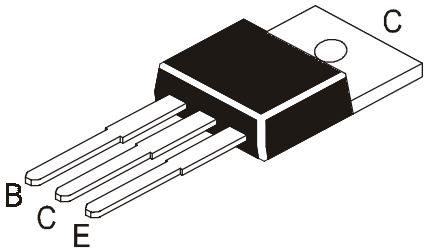
PLASTIC POWER TRANSISTORS

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



TO-220
Plastic Package

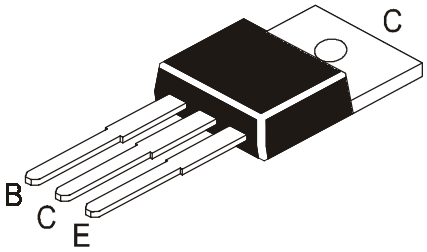
Power Linear and Switching Applications

ABSOLUTE MAXIMUM RATINGS (Ta=25ºC unless specified otherwise)

DESCRIPTION	SYMBOL	905 906	907 908	909 910	911 912	UNIT
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		ºC
Temperature Range	T_{stg}			-65 to +150		ºC

ELECTRICAL CHARACTERISTICS (Tc=25ºC Unless Otherwise Specified)

DESCRIPTION	SYMBOL		905 906	907 908	909 910	911 912	UNIT
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	1.0	1.0			mA
		V_{CE}=40V, I_B=0			1.0		mA
		V_{CE}=50V, I_B=0				1.0	mA
	I_{CBO}	I_E=0,V_{CB}=Rated V_{CBO},			0.5		mA
		I_E=0,V_{CB}=Rated V_{CBO}, T_c=150°C			5		mA
Emitter-Cut off Current	I_{EBO}	V_{EB}=5V, I_C=O			1.0		mA
Saturation Voltages	$V_{CE(Sat)}$*	I_C=5A, I_B=0.5A			1.0		V
		I_C=10A, I_B=2.5A			3.0		V
	$V_{BE(sat)}$*	I_C=10A, I_B=2.5A			2.5		V

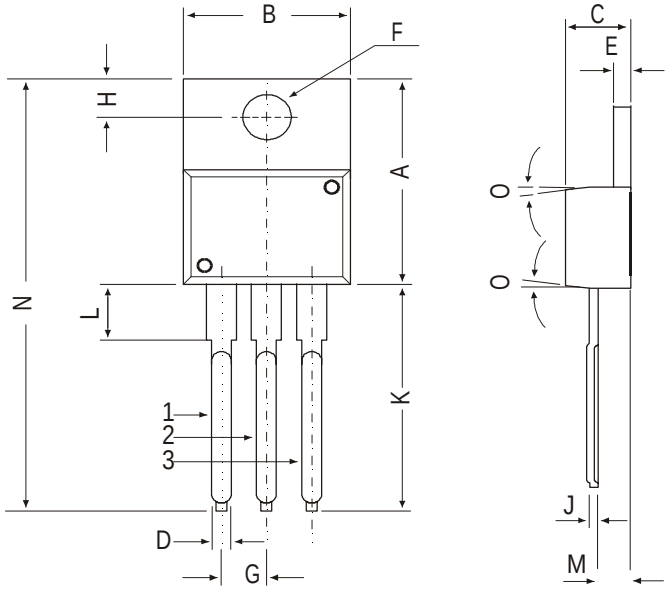


TO-220
Plastic Package

DESCRIPTION	SYMBOL		905 906	907 908	909 910	911 912	UNIT
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

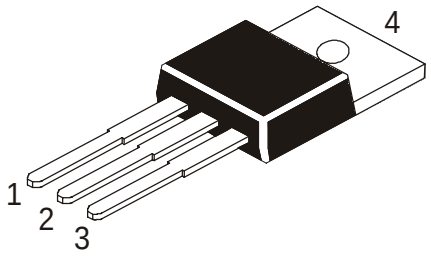
***Pulse Test:- Pulse Width<300µs, Duty Cycle=1.5%**

TO-220 Plastic Package



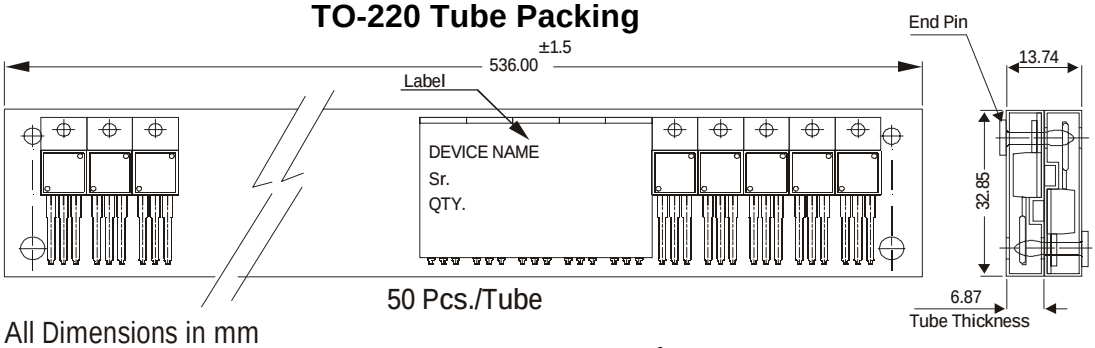
DIM	MIN	MAX
A	14.42	16.51
B	9.63	10.67
C	3.56	4.83
D	—	0.90
E	1.15	1.50
F	3.53	4.10
G	2.29	2.79
H	2.54	3.43
J	0.36	0.61
K	12.70	14.73
L	2.80	6.35
M	2.00	2.92
N	—	31.24
O	7 DEG	

All diminsions in mm.



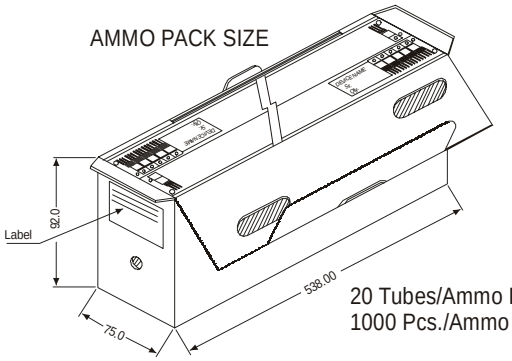
Pin Configuration
1. Base
2. Collector
3. Emitter
4. Collector

TO-220 Tube Packing



All Dimensions in mm

AMMO PACK SIZE



20 Tubes/Ammo Pack
1000 Pcs./Ammo Pack

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 50 pcs/tube	396 gm/200 pcs 135 gm/50 pcs	3" x 7.5" x 7.5" 3.5" x 3.7" x 21.5"	1K 1K	17" x 15" x 13.5" 19" x 19" x 19"	16K 10K	36 kgs 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).

Disclaimer

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