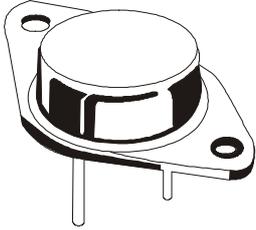


NPN POWER TRANSISTOR

2N3055HV

**TO-3
Metal Can Package**



Switching Regulator and Power Amplifier Applications

ABSOLUTE MAXIMUM RATINGS

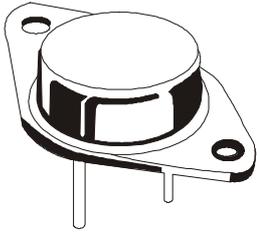
DESCRIPTION	SYMBOL	VALUE	UNITS
Collector Base Voltage (Open Emitter)	V_{CBO}	100	V
Collector Emitter Voltage (Open Base)	V_{CEO}	100	V
Emitter Base Voltage	V_{EBO}	7.0	V
Collector Current	I_C	15	A
Base Current	I_B	7.0	A
Total Power Dissipation up to $T_c=25^\circ\text{C}$	P_{tot}	100	W
Junction Temperature	T_j	200	$^\circ\text{C}$
Storage Temperature	T_{stg}	- 65 to +200	$^\circ\text{C}$
THERMAL RESISTANCE			
Junction to Case	$R_{th(j-c)}$	1.75	$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_c=25^\circ\text{C}$ unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
Breakdown Voltages					
	$V_{CEO(sus)}^*$	$I_C=200\text{mA}, I_B=0$	100		V
	V_{CBO}	$I_C=1\text{mA}, I_E=0$	100		V
	V_{EBO}	$I_E=1\text{mA}, I_C=0$	7		V
Collector Cut off Current	I_{CEX}	$V_{CE}=100\text{V}, V_{BE}=(\text{off})=1.5\text{V}$		1.0	mA
	I_{CEX}	$T_c=150^\circ\text{C}$ $V_{CE}=100\text{V}, V_{BE}=(\text{off})=1.5\text{V}$		5.0	
Collector Cut off Current	I_{CEO}	$V_{CE}=30\text{V}, I_B=0$		0.7	mA
Emitter Cut off Current	I_{EBO}	$V_{BE}=7\text{V}, I_C=0$		5.0	mA
Collector Emitter Saturation Voltage	$V_{CE(\text{Sat})}^*$	$I_C=4\text{A}, I_B=400\text{mA}$		1.1	V
		$I_C=10\text{A}, I_B=3.3\text{A}$		3.0	
Base Emitter on Voltage	$V_{BE(\text{on})}^*$	$I_C=4\text{A}, V_{CE}=4\text{V}$		2	V
DC Current Gain	h_{FE}^*	$I_C=4\text{A}, V_{CE}=4\text{V}$	20	100	
	h_{FE}^*	$I_C=10\text{A}, V_{CE}=4\text{V}$	5		

NPN POWER TRANSISTOR

2N3055HV



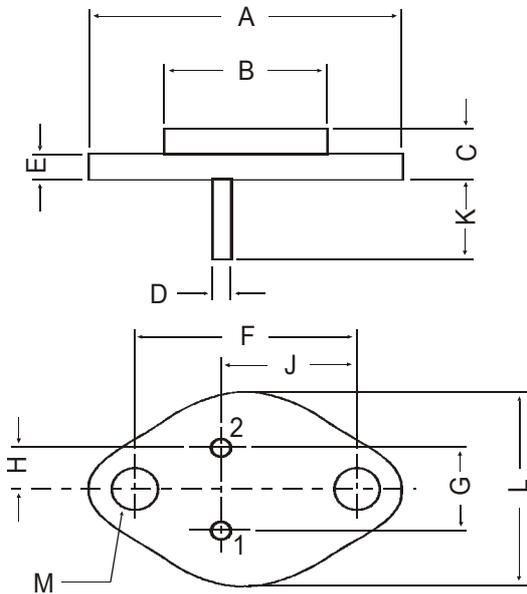
TO-3
Metal Can Package

ELECTRICAL CHARACTERISTICS ($T_C=25^\circ\text{C}$ unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
Second Breakdown Collector Current with Base Forward Biased	$I_{S/b}$	$V_{CE}=35\text{V}$, $t=1.0$ sec, Nonrepetitive	2.87		A
<u>Dynamic Characteristics</u>					
Transition Frequency	f_T	$I_C=0.5\text{A}$, $V_{CE}=10\text{V}$, $f=1\text{MHz}$	2.5		MHz

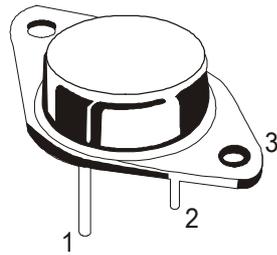
*Pulse Test: <300ms, Duty Cycle =2%

TO-3 Metal Can Package



DIM	MIN.	MAX.
A	—	39.37
B	—	22.22
C	6.35	8.50
D	0.96	1.09
E	—	1.77
F	29.90	30.40
G	10.69	11.18
H	5.20	5.72
J	16.64	17.15
K	11.15	12.25
L	—	26.67
M	3.84	4.19

All dimensions in mm.



PIN CONFIGURATION

1. BASE
2. EMITTER
3. COLLECTOR

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-3	100 pcs/pkt	1.3 kg/100 pcs	12.5" x 8" x 1.8"	0.1K	17" x 11.5" x 21"	2K	27.5 kgs

Disclaimer

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