



An IS/ISO 9002 and IECQ Certified Manufacturer

## **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 <sub>C</sub>	15	Α
Base Current	I <sub>B</sub>	7.0	Α
Total Power Dissipation up toT <sub>c</sub> =25°C	P <sub>tot</sub>	100	W
Junction Temperature	T <sub>j</sub>	200	°C
Storage Temperature	T <sub>stg</sub>	- 65 to +200	°C
THERMAL RESISTANCE			
Junction to Case	R <sub>th(j-c)</sub>	1.75	°C/W

## ELECTRICAL CHARACTERISTICS (T<sub>C</sub>=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
Breakdown Voltages					
	V <sub>CEO(sus)</sub> *	I <sub>C</sub> =200mA, I <sub>B</sub> =0	100		V
	$V_{CBO}$	$I_C=1$ mA, $I_E=0$	100		V
	$V_{EBO}$	$I_E=1$ mA, $I_C=0$	7		V
Collector Cut off Current	I <sub>CEX</sub>	V <sub>CE</sub> =100V, V <sub>BE</sub> =(off)=1.5V		1.0	mA
	I <sub>CEX</sub>	T <sub>c</sub> =150°C			
		V <sub>CE</sub> =100V, V <sub>BE</sub> =(off)=1.5V		5.0	
Collector Cut off Current	I <sub>CEO</sub>	V <sub>CE</sub> =30V, I <sub>B</sub> =0		0.7	mA
Emitter Cut off Current	I <sub>EBO</sub>	$V_{BE}=7V$ , $I_{C}=0$		5.0	mA
Collector Emitter Saturation Voltage	V <sub>CE(Sat)</sub> *	I <sub>C</sub> =4A, I <sub>B</sub> =400mA		1.1	V
	, ,	I <sub>C</sub> =10A, I <sub>B</sub> =3.3A		3.0	
Base Emitter on Voltage	V <sub>BE(on)</sub> *	I <sub>C</sub> =4A, V <sub>CE</sub> =4V		2	V
DC Current Gain	h <sub>FE</sub> *	I <sub>C</sub> =4A, V <sub>CE</sub> =4V	20	100	
	h <sub>FE</sub> *	$I_C=10A$ , $V_{CE}=4V$	5		

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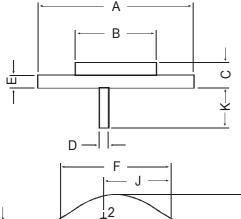
## ELECTRICAL CHARACTERISTICS (T<sub>C</sub>=25°C unless specified otherwise)

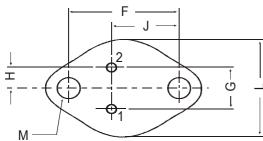
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
Second Breakdown Collector Current	I <sub>S</sub> /b	V <sub>CE</sub> =35V,t=1.0 sec,	2.87		Α
with Base Forward Biased		Nonrepetitive			
Dynamic Characteristics					
Transition Frequency	f <sub>T</sub>	I <sub>C</sub> =0.5A, V <sub>CE</sub> =10V, f=1MHz	2.5		MHz

<sup>\*</sup>Pulse Test: <300ms, Duty Cycle =2%

# TO-3 Metal Can Package

## **TO-3 Metal Can Package**



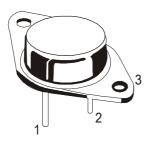


39.37 Α 22.22 В 6.35 С 8.50 D 0.96 1.09 1.77 Ε F 29.90 30.40 All dimensions in mm. G 10.69 11.18 5.72 Η 5.20 J 16.64 17.15 Κ 11.15 12.25 26.67 M 3.84 4.19

MIN.

MAX.

DIM



## 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

Notes 2N3055HV

**TO-3** 

**Metal Can Package** 

### **Disclaimer**

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