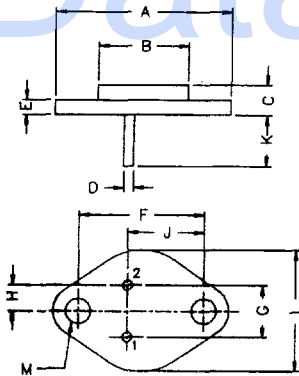
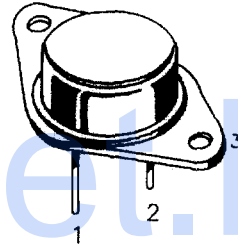


2N3055HV NPN POWER TRANSISTOR  
Switching Regulator and Power Amplifier Applications



ALL DIMENSIONS ARE IN M.M.

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	30,4
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



PIN CONFIGURATION  
1. BASE  
2. EMITTER  
3. COLLECTOR

**ABSOLUTE MAXIMUM RATINGS**

Collector-base voltage (open emitter)	$V_{CBO}$	max.	100 V
Collector-emitter voltage (open base)	$V_{CEO}$	max.	100 V
Collector current	$I_C$	max.	15 A
Total power dissipation up to $T_C = 25^\circ\text{C}$	$P_{tot}$	max.	100 W
Junction temperature	$T_j$	max.	200 °C
Collector-emitter saturation voltage $I_C = 4\text{A}; I_B = 400\text{mA}$	$V_{CEsat}$	max.	1.1 V
D.C. current gain $I_C = 4\text{A}; V_{CE} = 4\text{V}$	$h_{FE}$	min	20
		max.	100

**RATINGS** (at  $T_A=25^\circ\text{C}$  unless otherwise specified)

Limiting values

Collector-base voltage (open emitter)	$V_{CBO}$	max.	100 V
Collector-emitter voltage (open base)	$V_{CEO}$	max.	100 V
Emitter-base voltage (open collector)	$V_{EBO}$	max.	7.0 V
Collector current	$I_C$	max.	15 A

Base current	$I_B$	max.	7 A
Total power dissipation up to $T_C = 25^\circ\text{C}$	$P_{\text{tot}}$	max.	100 W
Junction temperature	$T_j$	max.	200 $^\circ\text{C}$
Storage temperature	$T_{\text{stg}}$		-65 to +200 $^\circ\text{C}$
<b>THERMAL RESISTANCE</b>			
From junction to case	$R_{\text{th j-c}}$	=	1.75 $^\circ\text{C/W}$
<b>CHARACTERISTICS</b>			
$T_{\text{amb}} = 25^\circ\text{C}$ unless otherwise specified			
Collector cutoff current			
$V_{CE} = 100\text{V}; V_{BE(\text{off})} = 1.5\text{V}$	$I_{CEX}$	max.	1 mA
$V_{CE} = 100\text{V}; V_{BE(\text{off})} = 1.5\text{V}; T_C = 150^\circ\text{C}$	$I_{CEX}$	max.	5 mA
$V_{CE} = 30\text{V}; I_B = 0$	$I_{CEO}$	max.	0.7 mA
Emitter cut-off current			
$I_C = 0; V_{EB} = 7\text{V}$	$I_{EBO}$	max.	5 mA
Breakdown voltages			
$I_C = 200\text{ mA}; I_B = 0$	$V_{CEO(\text{sus})}^*$	min.	100 V
$I_C = 1\text{ mA}; I_E = 0$	$V_{CBO}$	min.	100 V
$I_E = 1\text{ mA}; I_C = 0$	$V_{EBO}$	min.	7.0 V
Saturation voltages			
$I_C = 4\text{ A}; I_B = 400\text{ mA}$	$V_{CE\text{sat}}^*$	max.	1.1 V
$I_C = 10\text{ A}; I_B = 3.3\text{ A}$	$V_{CE\text{sat}}^*$	max.	3.0 V
Base emitter on voltage			
$I_C = 4\text{ A}; V_{CE} = 4\text{ V}$	$V_{BE(\text{on})}^*$	max.	2.0 V
D.C. current gain			
$I_C = 4\text{ A}; V_{CE} = 4\text{ V}$	$h_{FE}^*$	min.	20
		max.	100
$I_C = 10\text{ A}; V_{CE} = 4\text{ V}$	$h_{FE}^*$	min.	5
Transition frequency			
$I_C = 0.5\text{ A}; V_{CE} = 10\text{ V}; f = 1\text{ MHz}$	$f_T$	min.	2.5 MHz
Second breakdown collector current with base forward biased (non repetitive)			
$V_{CE} = 35\text{ V}; t = 1\text{ sec}$	$I_{S/b}$	min.	2.87 A

\* Pulse test: 300  $\mu\text{s}$ ; duty cycle = 2%.