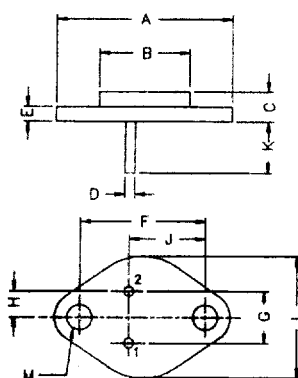


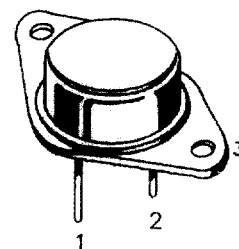
2SC1875 NPN POWER TRANSISTOR

Colour TV Horizontal Output 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.	1500 V
Collector-emitter voltage (open base)	V_{CEO}	max.	500 V
Collector current	I_C	max.	3.5 A
Total power dissipation up to $T_C = 25^\circ\text{C}$	P_{tot}	max.	50 W
Junction temperature	T_j	max.	200 $^\circ\text{C}$
Collector-emitter saturation voltage $I_C = 2.5\text{A}; I_B = 0.6\text{A}$	V_{CEsat}	max.	10 V
D.C. current gain $I_C = 0.5\text{A}; V_{CE} = 10\text{V}$	h_{FE}	min.	5
		max.	35

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

Limiting values			
Collector-base voltage (open emitter)	V_{CBO}	max.	1500 V
Collector-emitter voltage (open base)	V_{CEO}	max.	500 V
Emitter-base voltage (open collector)	V_{EBO}	max.	6 V
Collector current	I_C	max.	3.5 A

Collector current (surge)	I_C	max.	10 A
Total power dissipation up to $T_C = 25^\circ\text{C}$	P_{tot}	max.	50 W
Junction temperature	T_j	max.	200 $^\circ\text{C}$
Storage temperature	T_{stg}		-65 to +200 $^\circ\text{C}$

CHARACTERISTICS

$T_{\text{amb}} = 25^\circ\text{C}$ unless otherwise specified

Collector cut-off current

$I_E = 0$; $V_{CB} = 1000\text{V}$

I_{CBO} max. 20 μA

Emitter cut-off current

$I_C = 0$; $V_{EB} = 5\text{V}$

I_{EBO} max. 20 μA

Breakdown voltages

$I_C = 1\text{ mA}$; $I_B = 0$

V_{CEO} min. 500 V

$I_C = 1\text{ mA}$; $I_E = 0$

V_{CBO} min. 1500 V

$I_E = 1\text{ mA}$; $I_C = 0$

V_{EBO} min. 6 V

Saturation voltages

$I_C = 2.5\text{A}$; $I_B = 0.6\text{A}$

$V_{CE\text{sat}}^*$ max. 10 V

$V_{BE\text{sat}}^*$ max. 1.2 V

min. 0.8 V

D.C. current gain

$I_C = 0.5\text{A}$; $V_{CE} = 10\text{V}$

h_{FE}^* min. 5

max. 35

$I_C = 2\text{A}$; $V_{CE} = 10\text{V}$

h_{FE}^* min. 5

max. 25

Switching time

$I_C = 2.5\text{A}$; $I_{B1} = 0.6\text{A}$

$I_{B2} = -0.6\text{A}$

Fall time

t_f max. 1.0 μs

* Pulse test: pulse width $\leq 350\text{ }\mu\text{s}$, duty cycle $\leq 2\%$.