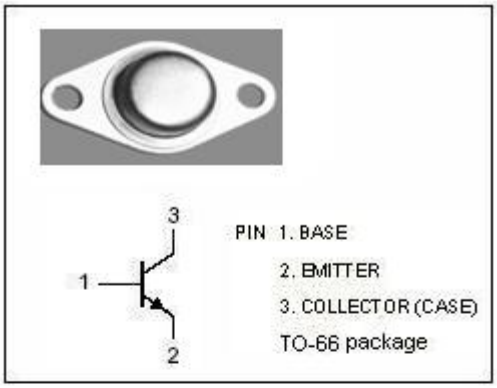
isc Silicon NPN Power Transistor 2SD470

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$= 700V(Min.)
- High Switching Speed
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

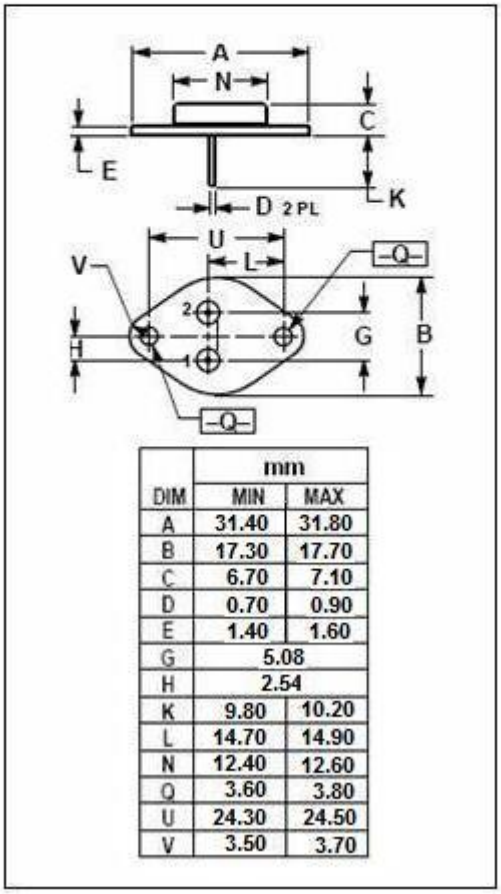


APPLICATIONS

- Designed for use in horizontal deflection circuits of color TV receivers.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1600	V
V_{CEO}	Collector-Emitter Voltage	700	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	1	A
I_{CM}	Collector Current-Peak	2	A
P_C	Collector Power Dissipation @ T_C=25℃	15	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃



DIM	mm MIN	MAX
A	31.40	31.80
B	17.30	17.70
C	6.70	7.10
D	0.70	0.90
E	1.40	1.60
G	5.08	
H	2.54	
K	9.80	10.20
L	14.70	14.90
N	12.40	12.60
Q	3.60	3.80
U	24.30	24.50
V	3.50	3.70

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 5mA ; I_B= 0	700			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 0.5A; I_B= 0.1A			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 0.5A; I_B= 0.1A			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 1000V ; I_E= 0			100	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0			100	μA
h_{FE-1}	DC Current Gain	I_C= 0.1A ; V_{CE}= 5V	6		30	
h_{FE-2}	DC Current Gain	I_C= 1A ; V_{CE}= 5V	2			
f_T	Current-Gain—Bandwidth Product	I_C= 0.1A ; V_{CE}= 5V		5		MHz
C_{OB}	Output Capacitance	I_E= 0 ; V_{CB}= 10V; f_{test}= 1.0MHz		40		pF
Switching Times; Resistive load						
t_{stg}	Storage Time	I_C= 0.5A , $I_{B(end)}$= 0.1A			6.0	μs
t_f	Fall Time				1.5	μs