

isc Silicon NPN Power Transistor
2SC1102
DESCRIPTION

- With TO-66 package
- High Voltage
- High transistor frequency
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

APPLICATIONS

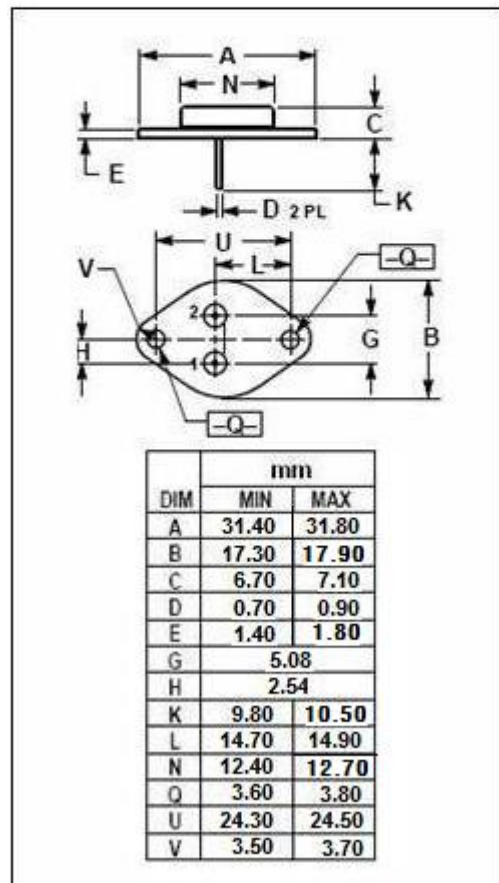
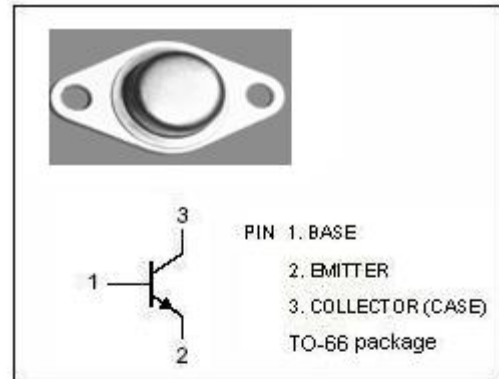
- Designed for use in color TV video output applications

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	300	V
V_{CEO}	Collector-Emitter Voltage	300	V
V_{EBO}	Emitter-Base Voltage	5	V
I_c	Collector Current-Continuous	50	mA
P_c	Collector Power Dissipation @ $T_c=25^{\circ}\text{C}$	11	W
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	11.36	$^{\circ}\text{C/W}$



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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 20mA; I _B = 2mA		1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 20mA; I _B = 2mA		1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 200V; I _B = 0		1.0	μA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C =0		1.0	μA
h _{FE}	DC Current Gain	I _C = 10mA; V _{CE} = 10V	40	200	
f _T	Current-Gain—Bandwidth Product	I _C = 10mA; V _{CE} = 20V, f _{test} = 1.0MHz	60		MHz

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