

isc Silicon NPN Power Transistor

2SC681

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 70V$ (Min)
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = 2.0V$ (Max.)@ $I_C = 5A$

APPLICATIONS

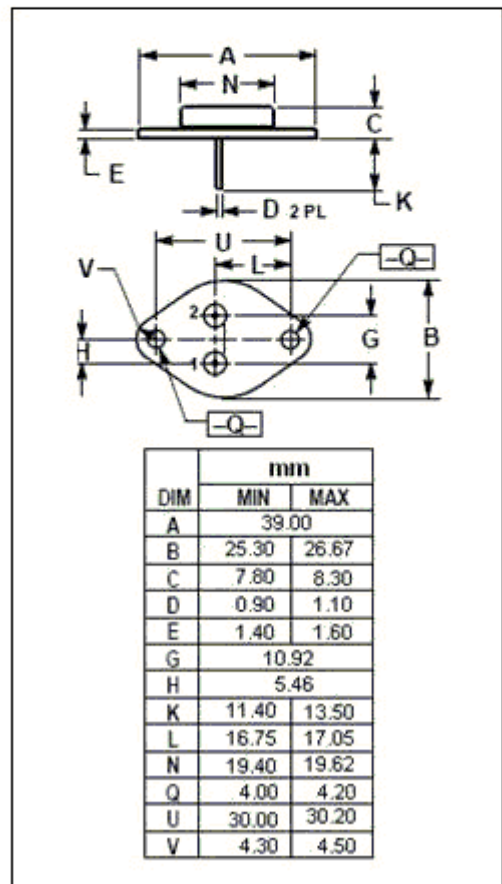
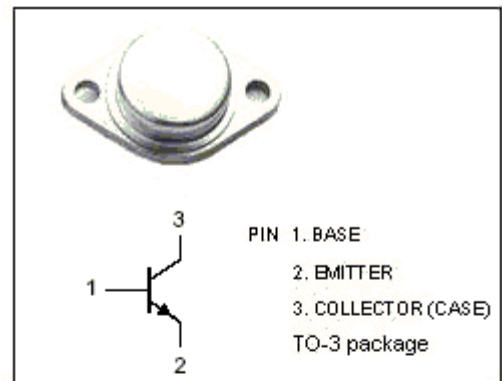
- Designed for use in B/W TV horizontal output applications.

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

SYMBOL	PARAMETER	MAX	UNIT
V_{CBO}	Collector-Base Voltage	200	V
V_{CEO}	Collector-Emitter Voltage	70	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	6	A
I_{CM}	Collector Current-Peak	20	A
I_B	Base Current-Continuous	2	A
P_C	Collector Power Dissipation @ $T_C=25^\circ C$	50	W
T_j	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-65~150	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.5	$^\circ C/W$



isc Silicon NPN Power Transistor**2SC681****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=50\text{mA}; I_B=0$	70			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=5\text{A}; I_B=0.6\text{A}$			2.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=5\text{A}; I_B=0.6\text{A}$			1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=200\text{V}; I_E=0$			1.0	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5\text{V}; I_C=0$			10	mA
t_f	Fall Time	$I_C=5\text{A}; V_{CC}=25\text{V}$			0.5	μs