

INCHANGE Semiconductor

isc Product Specification

isc Silicon PNP Power Transistor

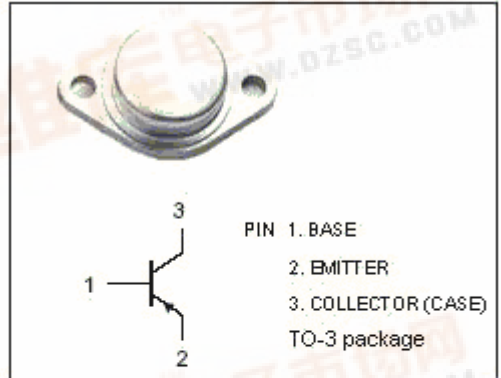
2SB681

DESCRIPTION

- High Current Capability
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = -150V(\text{Min.})$

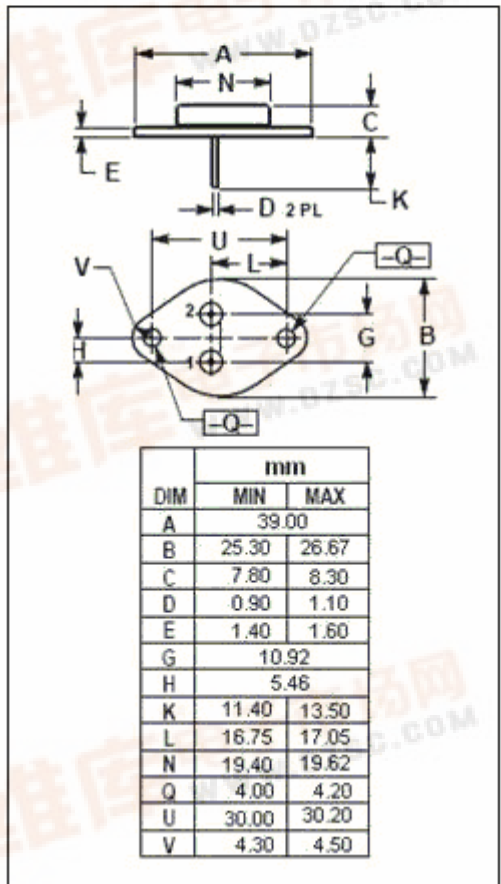
APPLICATIONS

- For AF power amplifier use.
- Recommended for use in output stage of 80 watts power amplifier .



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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-150	V
$V_{CEO}$	Collector-Emitter Voltage	-150	V
$V_{EBO}$	Emitter-Base Voltage	-6	V
$I_c$	Collector Current-Continuous	-12	A
$P_c$	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	100	W
$T_j$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55~150	$^\circ\text{C}$



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## ELECTRICAL CHARACTERISTICS

T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -50mA ; I <sub>B</sub> = 0	-150			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = -1mA ; I <sub>C</sub> = 0	-6			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -6A; I <sub>B</sub> = -0.6A			-2.5	V
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> = -120V; I <sub>B</sub> = 0			-0.1	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -5V; I <sub>C</sub> = 0			-0.1	mA
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = -1A ; V <sub>CE</sub> = -5V	40		140	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -5A ; V <sub>CE</sub> = -5V	20			
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = -1A ; V <sub>CE</sub> = -5V		13		MHz