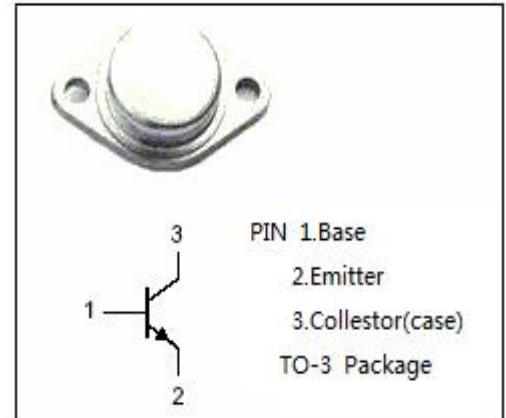


isc Silicon NPN Power Transistor
2SD551
DESCRIPTION

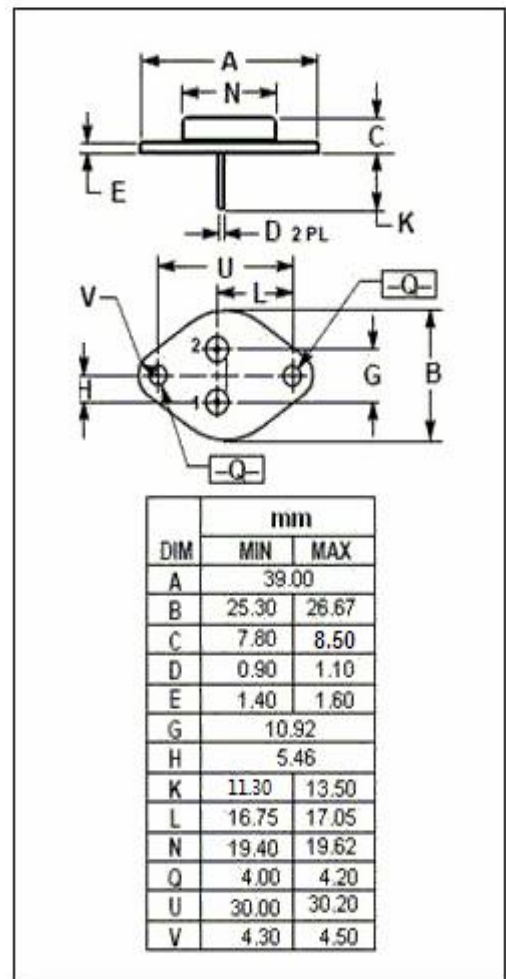
- High Current Capability
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 150V(\text{Min.})$
- Complement to Type 2SB681
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- For AF power amplifier applications.
- 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	5	V
I_C	Collector Current-Continuous	12	A
I_E	Emitter 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	-65~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SD551****ELECTRICAL CHARACTERISTICS**T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 10mA; I _B = 0	150			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 1mA; I _C = 0	5			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 5A; I _B = 0.5A			2.5	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 5A; V _{CE} = 5V			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 100V; I _E = 0			0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			0.1	mA
h _{FE}	DC Current Gain	I _C = 1A; V _{CE} = 5V	40		140	
f _T	Current-Gain—Bandwidth Product	I _C = 1A; V _{CE} = 10V		15		MHz
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V; f _{test} = 1MHz		250		pF

◆ **h_{FE} Classifications**

R	O
40-80	70-140

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