

isc Silicon NPN Power Transistor
2SD861
DESCRIPTION

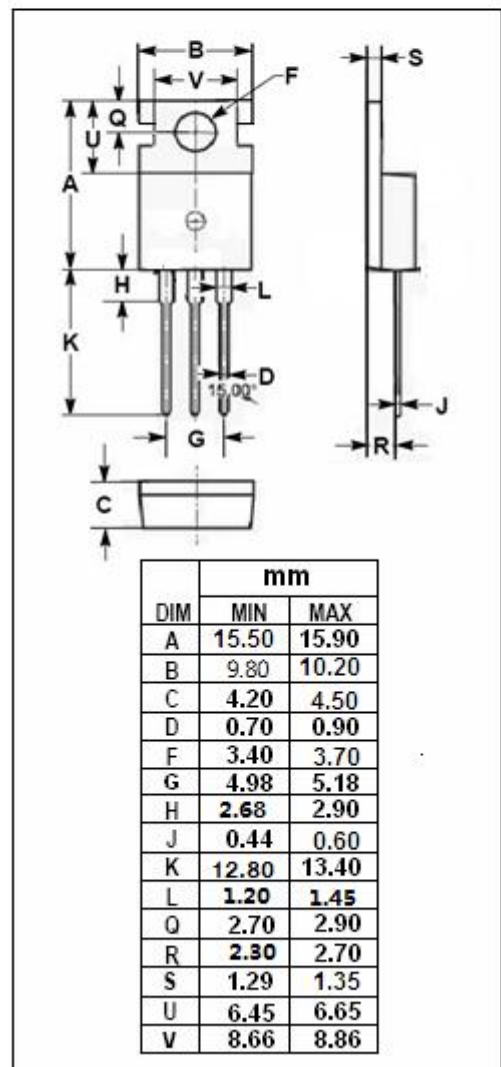
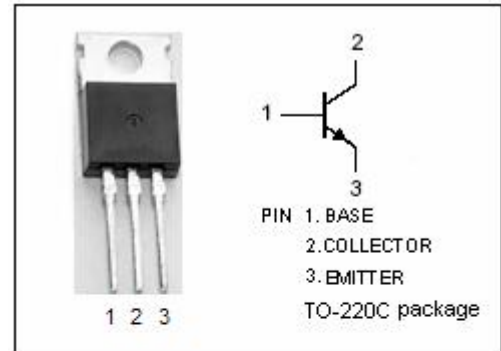
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 250V(\text{Min})$
- High Power Dissipation-
: $P_C = 45W @ T_C = 25^\circ\text{C}$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for audio frequency power amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	350	V
V_{CEO}	Collector-Emitter Voltage	250	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	1.5	A
I_{CM}	Collector Current-Peak	3.0	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	45	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SD861****ELECTRICAL CHARACTERISTICS**T_c=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	250			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 1.5A; I _B = 0.3A			1.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 1.5A ; V _{CE} = 10V			1.5	V
I _{CEO}	Collector Cutoff Current	V _{CE} = 150V; I _B = 0			1.0	mA
I _{CES}	Collector Cutoff Current	V _{CE} = 350V; V _{BE} = 0			1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			1.0	mA
h _{FE-1}	DC Current Gain	I _C = 0.3A ; V _{CE} = 10V	40		250	
h _{FE-2}	DC Current Gain	I _C = 1.5A ; V _{CE} = 10V	10			

◆ **h_{FE-1} Classifications**

R	Q	P
40-90	70-150	120-250

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