

## **isc** Silicon NPN Power Transistor

# 2SD2061

## DESCRIPTION

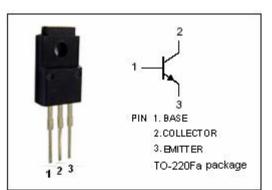
- Low Collector Saturation Voltage : V<sub>CE(sat)</sub>= 0.3V(TYP.) @ I<sub>C</sub>= 2A
- Collector Power Dissipation : P<sub>c</sub> = 30W (Max)
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

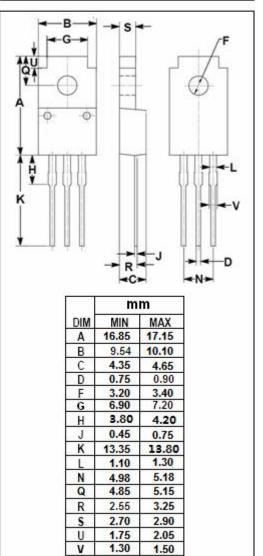
## **APPLICATIONS**

Designed for low frequency power amplifier applications

## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>CBO</sub>	Collector-Base Voltage	80	V	
V <sub>CEO</sub>	Collector-Emitter Voltage	60	V	
V <sub>EBO</sub>	Emitter-Base Voltage	5	V	
lc	Collector Current-Continuous	3	А	
Ісм	Collector Current-Pulse	6	А	
Pc	Collector Power Dissipation @ $T_C$ =25 °C	30	W	
	Collector Power Dissipation @ $T_a=25^{\circ}C$	2.0		
TJ	Junction Temperature	150	°C	
T <sub>stg</sub>	Storage Temperature Range	-55~150	Ĉ	





## isc website: www.iscsemi.com



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## ELECTRICAL CHARACTERISTICS

#### $T_{c}\text{=}25^{\circ}\!\!\!\!\!\!C$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 1mA ; I <sub>B</sub> = 0	60			V
V <sub>(BR)</sub> CBO	Collector-Base Breakdown Voltage	I <sub>C</sub> = 50 μ A ; I <sub>E</sub> = 0	80			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 50 μ A ; I <sub>C</sub> = 0	5			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 2A; I <sub>B</sub> = 0.2A			1.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	Ic= 2A; I <sub>B</sub> = 0.2A			1.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 60V; I <sub>E</sub> = 0			10	μA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 4V; I <sub>C</sub> =0			10	μA
h <sub>FE</sub>	DC Current Gain	Ic= 0.5A ; V <sub>CE</sub> = 5V	100		320	
f⊤	Current-Gain—Bandwidth Product	I <sub>C</sub> = 0.5A ; V <sub>CE</sub> = 5V		8		MHz
Сов	Output Capacitance	I <sub>E</sub> = 0 ; V <sub>CB</sub> = 10V;f <sub>test</sub> = 1.0MHz		70		pF

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