

isc Silicon NPN Power Transistor

2SD2061

DESCRIPTION

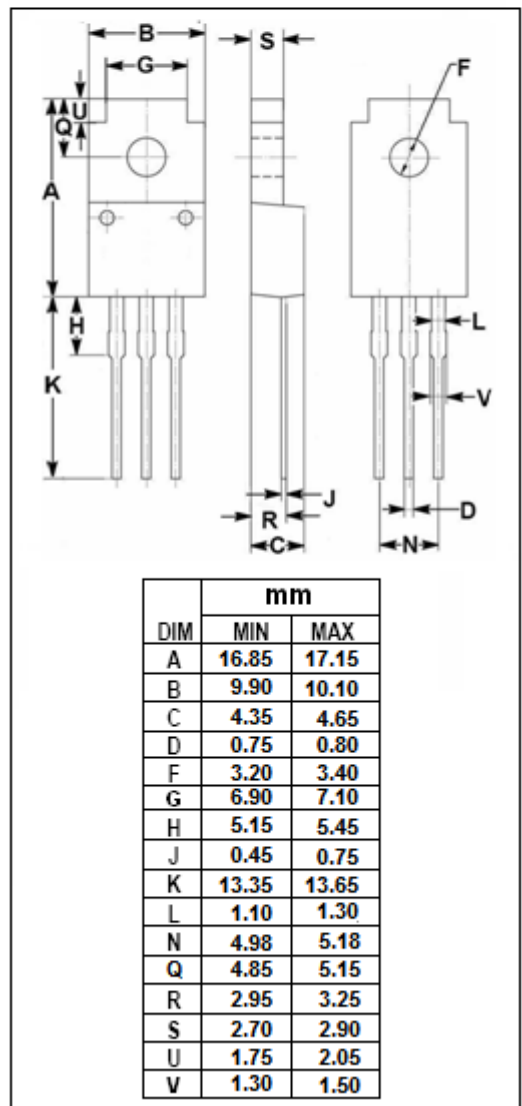
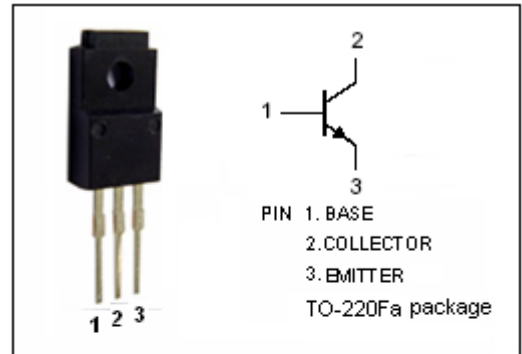
- Low Collector Saturation Voltage
: $V_{CE(sat)} = 0.3V(TYP.) @ I_C = 2A$
- Collector Power Dissipation
: $P_C = 30W (Max)$
- Wide Area of Safe Operation

APPLICATIONS

- Designed for low frequency power amplifier applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	3	A
I_{CM}	Collector Current-Pulse	6	A
P_C	Collector Power Dissipation @ $T_C=25^\circ C$	30	W
	Collector Power Dissipation @ $T_a=25^\circ C$	2.0	
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



isc Silicon NPN Power Transistor**2SD2061****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 = 1mA ; I _B = 0	60			V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 50 μ A ; I _E = 0	80			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 50 μ A ; I _C = 0	5			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 2A; I _B = 0.2A		0.3	1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 2A; I _B = 0.2A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 60V; I _E = 0			10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 4V; I _C =0			10	μ A
h _{FE}	DC Current Gain	I _C = 0.5A ; V _{CE} = 5V	100		320	
f _T	Current-Gain—Bandwidth Product	I _C = 0.5A ; V _{CE} = 5V		8		MHz
C _{OB}	Output Capacitance	I _E = 0 ; V _{CB} = 10V; f _{test} = 1.0MHz		70		pF

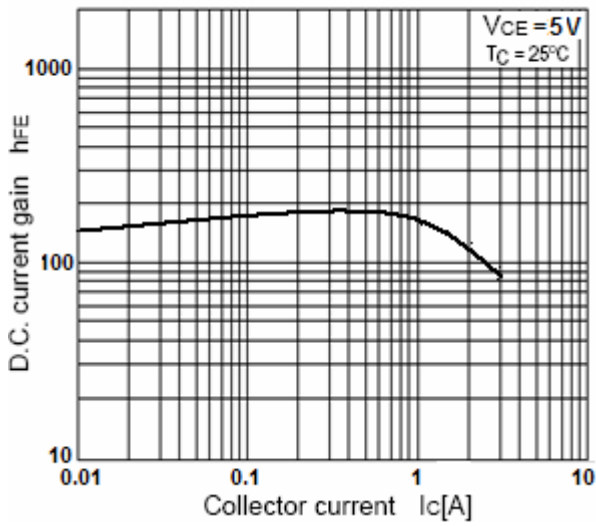
◆ **h_{FE} classifications**

E	F
100-200	160-320

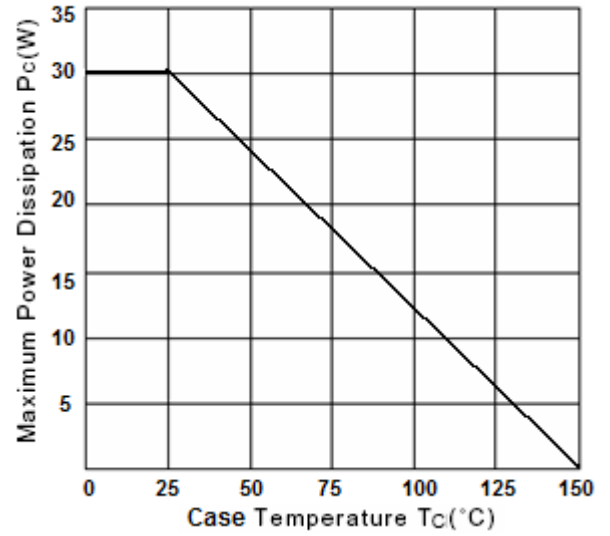
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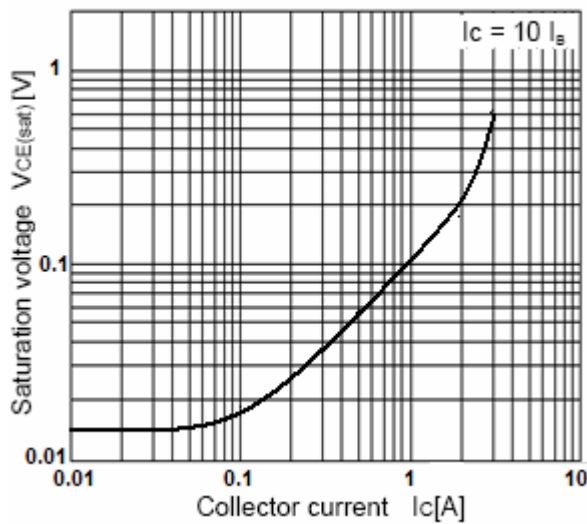
h_{FE} - I_C Characteristics



Power Derating



$V_{CE(sat)}$ - I_C Characteristics



Safe Operating Area

