

isc Silicon NPN Power Transistor
2SD2406
DESCRIPTION

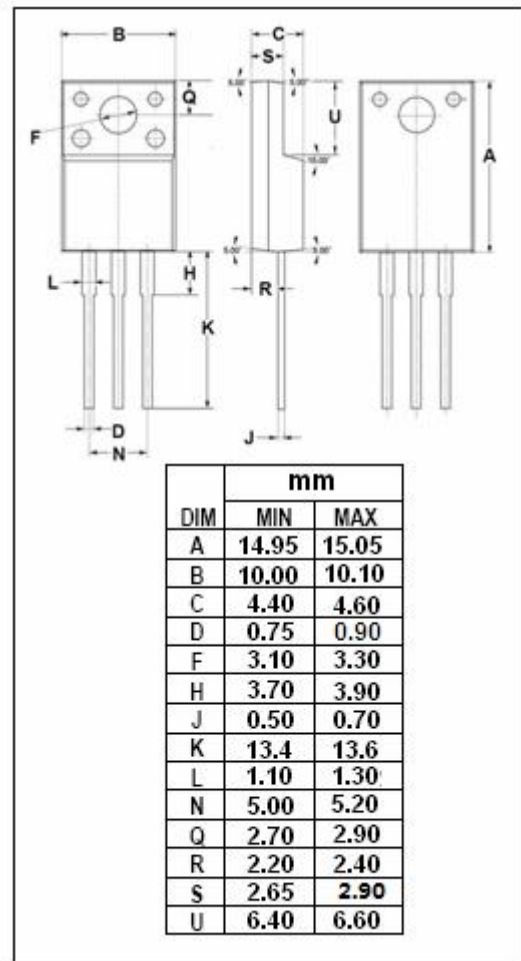
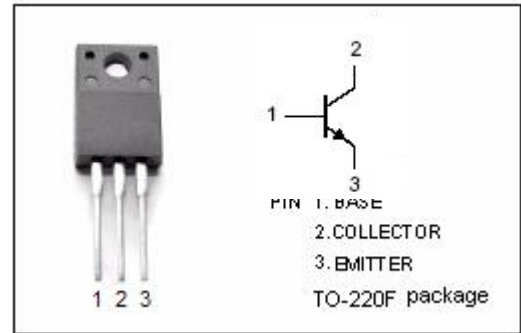
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 80V(\text{Min})$
- Collector Power Dissipation-
: $P_C = 25W @ T_C = 25^\circ C$
- Good Linearity of h_{FE}
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for 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	80	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	4	A
I_B	Base Current-Continuous	0.4	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ C$	25	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$



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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 = 30mA; I _B = 0	80			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 = 3A; I _B = 0.3A			1.5	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 3A; V _{CE} = 5V			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 80V; I _E = 0			30	μA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			100	μA
h _{FE-1}	DC Current Gain	I _C = 0.5A; V _{CE} = 5V	70		240	
h _{FE-2}	DC Current Gain	I _C = 3A; V _{CE} = 5V	15			
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V; f _{test} = 1MHz		90		pF
f _T	Current-Gain—Bandwidth Product	I _C = 0.5A; V _{CE} = 5V		8		MHz

◆ h_{FE-1} Classifications

O	Y
70-140	120-240

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