

isc Silicon NPN Power Transistor

2SD401A

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 150V$ (Min)
- Collector Power Dissipation-
: $P_C = 25W(Max) @ T_C = 25^{\circ}C$
- Complement to Type 2SB546A

APPLICATIONS

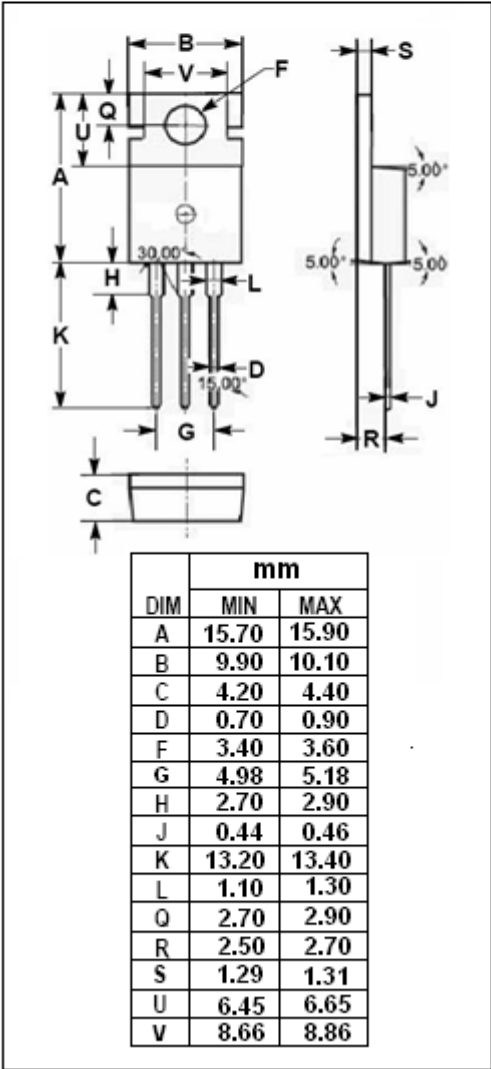
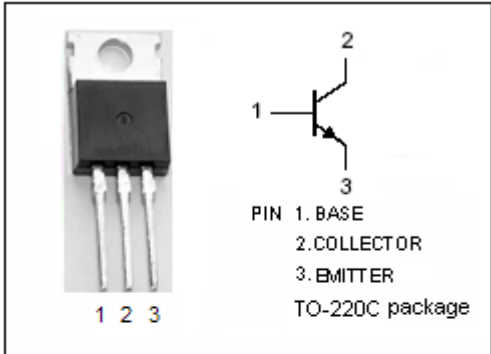
- Designed for use in general purpose power amplifier, vertical output applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	200	V
V_{CEO}	Collector-Emitter Voltage	150	V
V_{EBO}	Emitter-Base Voltage	5.0	V
I_C	Collector Current-Continuous	2	A
I_{CM}	Collector Current-Peak	3	A
P_C	Total Power Dissipation @ $T_C=25^{\circ}C$	25	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	5.0	$^{\circ}C/W$



isc Silicon NPN Power Transistor**2SD401A****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	150			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 0.5A; I _B = 50mA			2.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 150V; I _E = 0			50	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 4V; I _C = 0			50	μ A
h _{FE}	DC Current Gain	I _C = 0.4A; V _{CE} = 10V	40		200	
f _T	Current-Gain—Bandwidth Product	I _C = 0.4A; V _{CE} = 10V		5		MHz

◆ h_{FE} Classifications

M	L	K
40-80	60-120	100-200