

isc Silicon NPN Power Transistor

2SC4622

DESCRIPTION

- High Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 400V(\text{Min})$
- High Switching Speed
- Low Collector Saturation Voltage
- High Reliability

APPLICATIONS

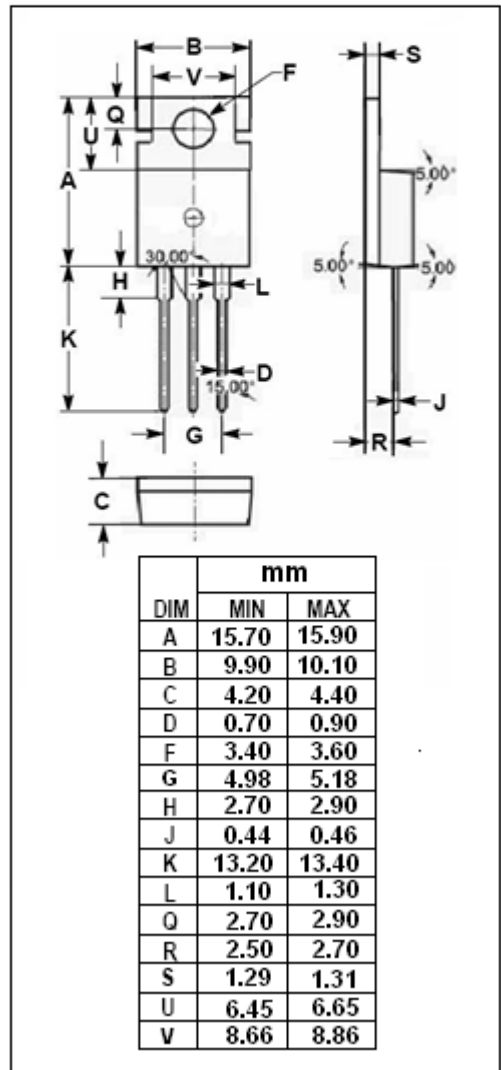
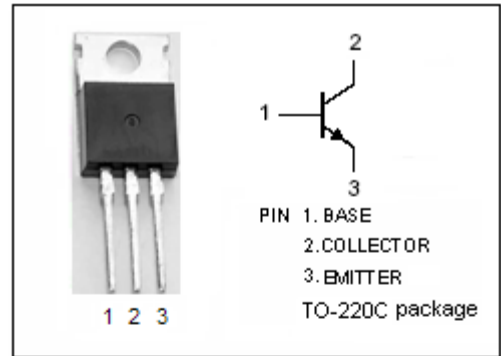
- Switching regulators
- Ultrasonic generators
- Solid state relay
- General purpose power amplifiers

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	500	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base voltage	10	V
I_C	Collector Current-Continuous	7	A
I_B	Base Current-Continuous	2	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	50	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.5	$^\circ\text{C/W}$



isc Silicon NPN Power Transistor**2SC4622****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 0.2A; I _B = 0	400			V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 1mA; I _E = 0	500			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 1mA; I _C = 0	10			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 4A; I _B = 0.8A			0.8	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 4A; I _B = 0.8A			1.2	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 450V ; I _E =0			0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 10V; I _C =0			0.1	mA
h _{FE}	DC Current Gain	I _C = 4A; V _{CE} = 5V	10			

Switching times

t _{on}	Turn-on Time	I _C = 5A; I _{B1} = 1A; I _{B2} = -2A; R _L = 30 Ω ; P _W =20 μ s; Duty Cycle ≤ 2%			1.0	μ s
t _{stg}	Storage Time				2.5	μ s
t _f	Fall Time				0.5	μ s