

isc Silicon NPN Power Transistor

2SC1625

DESCRIPTION

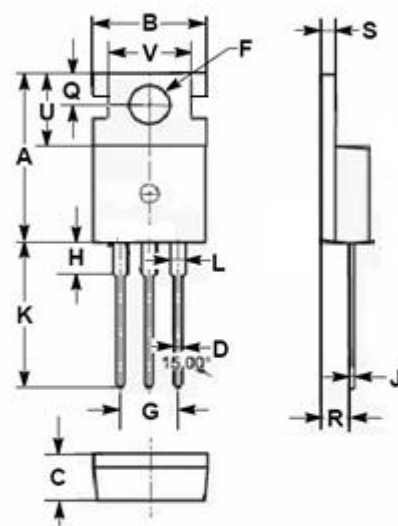
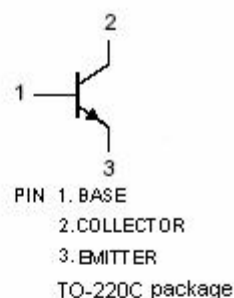
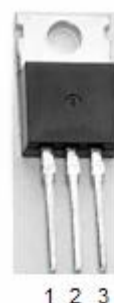
- Silicon NPN planar type
- Complementary to 2SA815
- High breakdown voltage
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Medium power amplifier applications
- Driver stage amplifier applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	1	A
I_E	Emitter Current-Continuous	-1	A
P_C	Collector Power Dissipation @ $T_a=25^{\circ}\text{C}$	1.5	W
	Collector Power Dissipation @ $T_c=25^{\circ}\text{C}$	15	
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$



DIM	mm	
	MIN	MAX
A	15.50	15.90
B	9.80	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	12.80	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

isc Silicon NPN Power Transistor**2SC1625****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 = 20mA ; I _B = 0	100			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 0.5A; I _B = 50mA			0.5	V
V _{BE(ON)}	Base-Emitter ON Voltage	I _C = 0.5A ; V _{CE} = 5V			1.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 50V ; I _E = 0			1.0	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			1.0	μ A
h _{FE-1}	DC Current Gain	I _C = 150mA ; V _{CE} = 5V	70		240	
h _{FE-2}	DC Current Gain	I _C = 0.5A ; V _{CE} = 5V	40			
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V; f _{test} = 1MHz		20		pF
f _T	Current-Gain—Bandwidth Product	I _C = 150mA; V _{CE} = 5V	10			MHz

◆ **h_{FE-1} Classifications**

O	Y
70-140	120-240

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