

isc Silicon NPN Power Transistor

2SC4330

DESCRIPTION

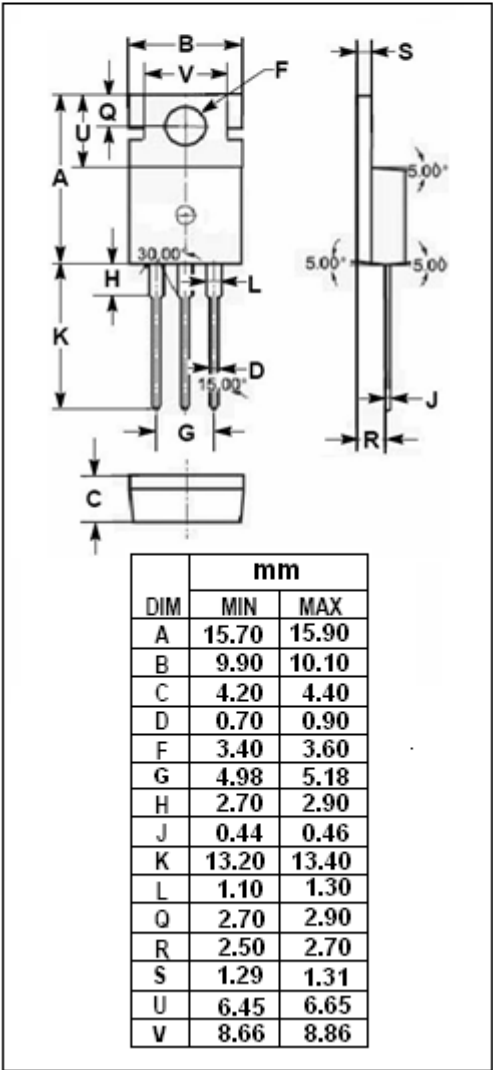
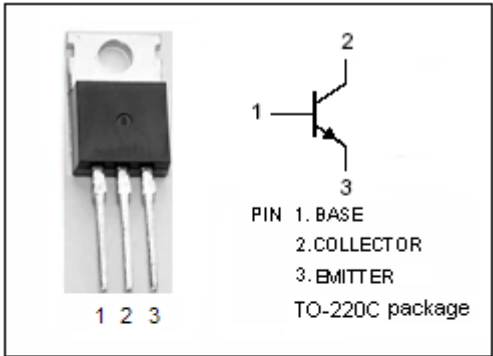
- Low Collector Saturation Voltage
: $V_{CE(sat)} = 0.5V(\text{Max}) @ I_C = 8A$
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 100V (\text{Min})$
- High Switching Speed

APPLICATIONS

- Designed for high speed and power switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	150	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	10	A
I_{CM}	Collector Current-Peak	20	A
I_B	Base Current-Continuous	5	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}C$	40	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$



ISC Silicon NPN Power Transistor**2SC4330****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 = 3A ; I _B = 0.3A, L= 1mH	100			V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = 6A; I _B = 0.3A			0.3	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = 8A; I _B = 0.4A			0.5	V
V _{BE(sat)-1}	Base-Emitter Saturation Voltage	I _C = 6A; I _B = 0.3A			1.2	V
V _{BE(sat)-2}	Base-Emitter Saturation Voltage	I _C = 8A; I _B = 0.4A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 150V; I _E = 0			10	μ A
I _{CEX}	Collector Cutoff Current	V _{CE} = 100V; V _{BE} = -1.5V V _{CE} = 100V; V _{BE} = -1.5V; T _a =125°C			10 1.0	μ A mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			10	μ A
h _{FE-1}	DC Current Gain	I _C = 1A ; V _{CE} = 2V	100			
h _{FE-2}	DC Current Gain	I _C = 2A ; V _{CE} = 2V	100	200	400	
h _{FE-3}	DC Current Gain	I _C = 6A ; V _{CE} = 2V	60			

◆ h_{FE-2} classifications

M	L	K
100-200	150-300	200-400