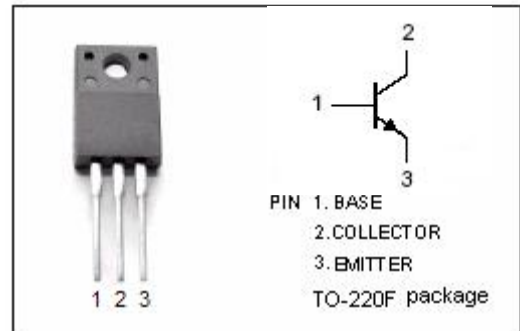


isc Silicon NPN Power Transistor
2SC5305
DESCRIPTION

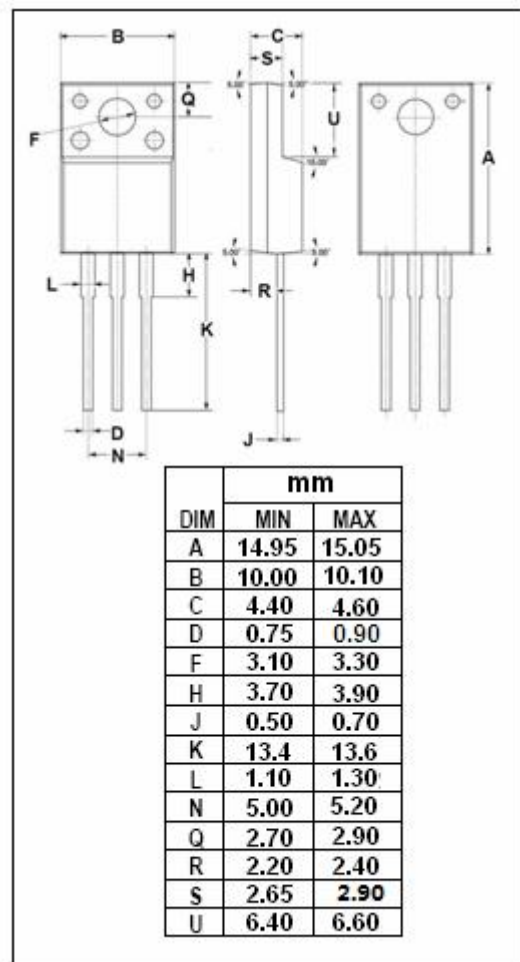
- High Breakdown Voltage
: $V_{(BR)CBO} = 1200V$ (Min)
- High Speed Switching
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for inverter lighting applications.


Absolute maximum ratings ($T_a=25^\circ C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1200	V
V_{CEO}	Collector-Emitter Voltage	600	V
V_{EBO}	Emitter-Base Voltage	9	V
I_C	Collector Current-Continuous	6	A
I_{CM}	Collector Current-Peak	12	A
P_C	Collector Power Dissipation @ $T_a=25^\circ C$	2	W
	Collector Power Dissipation @ $T_c=25^\circ C$	35	
T_j	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



isc Silicon NPN Power Transistor**2SC5305****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 = 10mA; I _B = 0	600			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 3A; I _B = 0.6A			1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 3A; I _B = 0.6A			1.5	V
h _{FE-1}	DC Current Gain	I _C = 0.3A; V _{CE} = 5V	30		50	
h _{FE-2}	DC Current Gain	I _C = 2.5A; V _{CE} = 5V	10			
I _{CBO}	Collector Cutoff Current	V _{CB} = 600V; I _E = 0			10	μA
I _{CES}	Collector Cutoff Current	V _{CE} = 1200V; R _{BE} = 0			1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 9V; I _C = 0			1.0	mA

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