

isc Silicon NPN Power Transistor

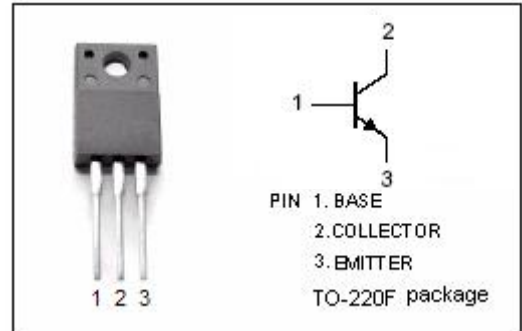
2SC5353

DESCRIPTION

- Collector–Emitter Sustaining Voltage
: $V_{CEO(SUS)} = 800V(\text{Min.})$
- Low Collector Saturation Voltage
: $V_{CE(sat)} = 1V(\text{Max}) @ I_C = 1.2A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

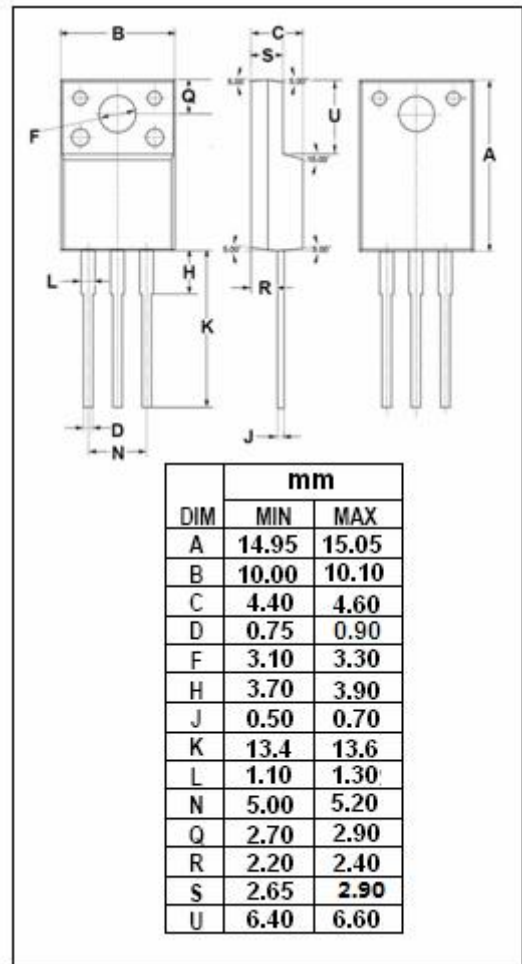
APPLICATIONS

- Designed for use in lighting applications and low cost switch-mode power supplies



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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Emitter Voltage	900	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	3	A
I_{CM}	Collector Current-peak $t_p < 5ms$	5	A
I_B	Base Current-Continuous	1	A
P_C	Collector Power Dissipation $T_C=25^{\circ}C$	25	W
	Collector Power Dissipation $T_a=25^{\circ}C$	2	W
T_j	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$



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ELECTRICAL CHARACTERISTICS

T_c =25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CBO}	Collector -Base Breakdown Voltage	I _C = 1mA; I _E = 0	900			V
V _{(BR)CEO}	Collector - Emitter Breakdown Voltage	I _C = 10mA; I _B = 0	800			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 1.2A; I _B = 0.24A			1	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 1.2A; I _B = 0.24A			1.3	V
I _{CBO}	Collector Cutoff Current	V _{CE} =720V; I _E = 0			0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 7V; I _C = 0			10	uA
h _{FE-1}	DC Current Gain	I _C = 1mA; V _{CE} = 5V	10			
h _{FE-2}	DC Current Gain	I _C = 0.15A; V _{CE} = 5V	15			

Switching Times, Inductive Load

t _s	Storage Time	I _{B1} = 0.24A;			4	μs
t _f	Fall Time				0.5	μs

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