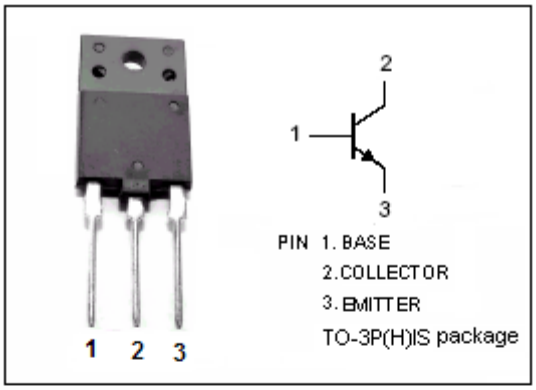
isc Silicon NPN Power Transistor 2SC5803



DESCRIPTION

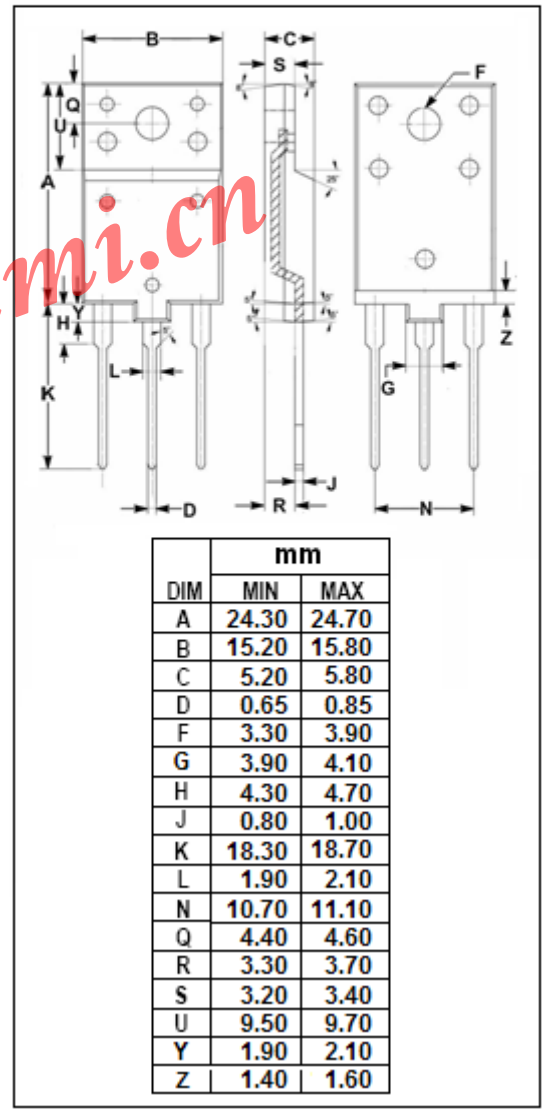
- High Breakdown Voltage-
  : V_{CBO}= 1500V (Min)
- High Switching Speed
- Wide Area of Safe Operation

APPLICATIONS

- Designed for high voltage color display horizontal deflection output applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current- Continuous	12	A
I_{CM}	Collector Current- Peak	24	A
P_C	Collector Power Dissipation @ T_C=25℃	70	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	MAX
A	24.30	24.70
B	15.20	15.80
C	5.20	5.80
D	0.65	0.85
F	3.30	3.90
G	3.90	4.10
H	4.30	4.70
J	0.80	1.00
K	18.30	18.70
L	1.90	2.10
N	10.70	11.10
Q	4.40	4.60
R	3.30	3.70
S	3.20	3.40
U	9.50	9.70
Y	1.90	2.10
Z	1.40	1.60

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 8A; I_B= 2A			3.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 8A; I_B= 2A			1.5	V
I_{CES}	Collector Cutoff Current	V_{CE}= 1400V; V_{BE}= 0			1.0	mA
I_{CBO}	Collector Cutoff Current	V_{CB}= 800V; I_E= 0			10	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 4V; I_C= 0			1.0	mA
h_{FE-1}	DC Current Gain	I_C= 1A; V_{CE}= 5V	15		40	
h_{FE-2}	DC Current Gain	I_C= 8A; V_{CE}= 5V	5.5		8.5	
Switching Times						
t_{stg}	Storage Time	I_C= 7A, I_{B1}= 1.4A; I_{B2}= -2.8A; V_{CC}= 200V; RL= 28.6Ω			4.0	μs
t_f	Fall Time				0.3	μs