

## isc Silicon NPN Power Transistor

2SD5703

## DESCRIPTION

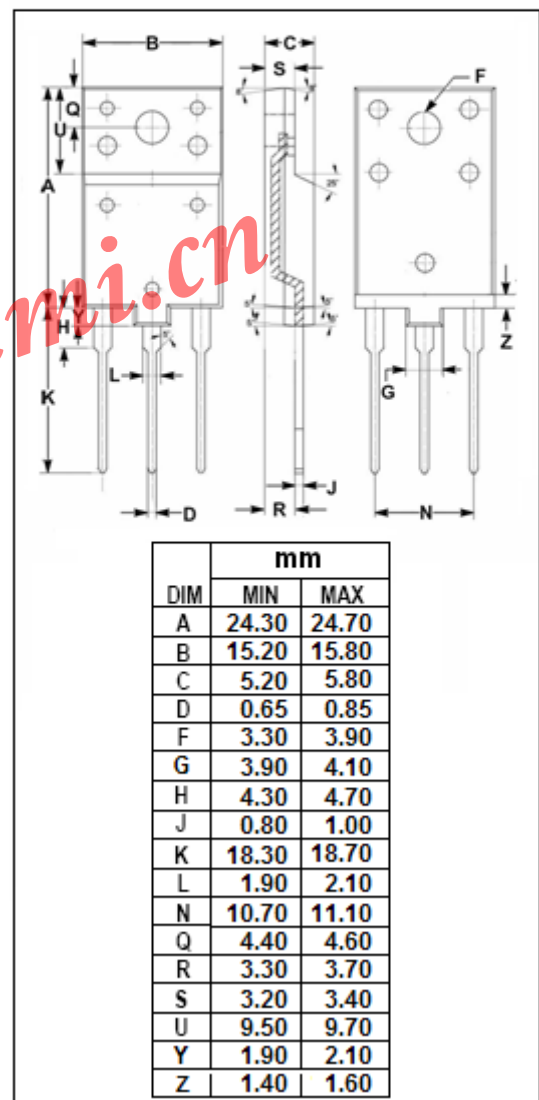
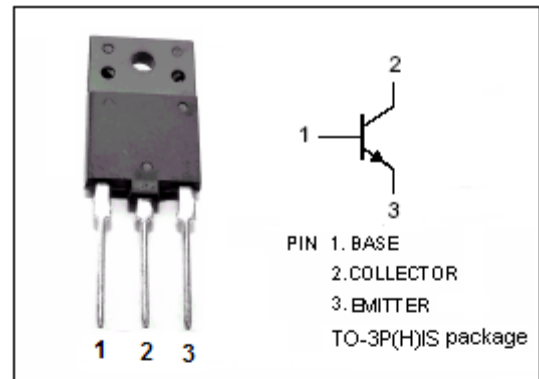
- High Breakdown Voltage-  
:  $V_{CBO} = 1500V$  (Min)
- High Switching Speed
- Low Saturation Voltage

## APPLICATIONS

- Designed for color TV horizontal output applications

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

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	10	A
$I_C$	Collector Current- Pulse	30	A
$P_C$	Collector Power Dissipation @ $T_C=25^\circ C$	70	W
$T_J$	Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ C$



**isc Silicon NPN Power Transistor****2SD5703****ELECTRICAL CHARACTERISTICS****T<sub>C</sub>=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 8A; I <sub>B</sub> = 1.6A			5.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 8A; I <sub>B</sub> = 1.6A			1.5	V
I <sub>CES</sub>	Collector Cutoff Current	V <sub>CE</sub> = 1400V; V <sub>BE</sub> = 0			1	mA
I <sub>CB0</sub>	Collector Cutoff Current	V <sub>CB</sub> = 800V; I <sub>E</sub> = 0			10	μ A
I <sub>CB0</sub>	Collector Cutoff Current	V <sub>EB</sub> = 4V; I <sub>C</sub> = 0			1	mA
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = 1A; V <sub>CE</sub> = 5V	15		40	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = 8A; V <sub>CE</sub> = 5V	5.3		7.3	
t <sub>f</sub>	Fall Time	I <sub>C</sub> = 6A, I <sub>B1</sub> = 1.2A; I <sub>B2</sub> = -2.4A; V <sub>CC</sub> = 200V; R <sub>L</sub> = 33.3 Ω			0.3	μ s