

Silicon NPN Power Transistor

KSD5703

DESCRIPTION

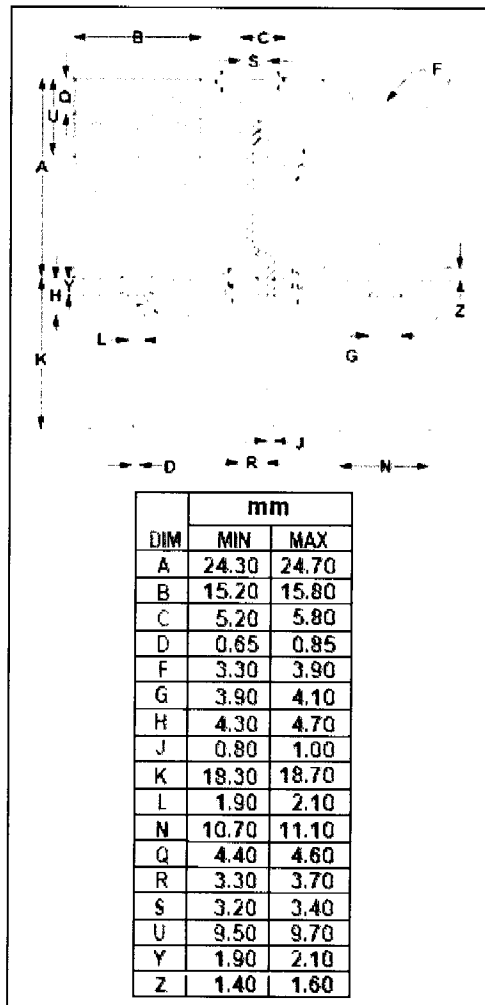
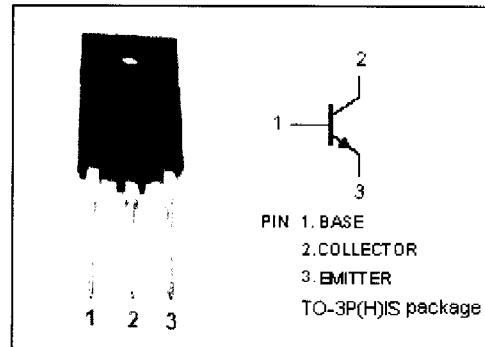
- High Breakdown Voltage-
 : $V_{CBO} = 1500V$ (Min)
- High Switching Speed
- Low Saturation Voltage

APPLICATIONS

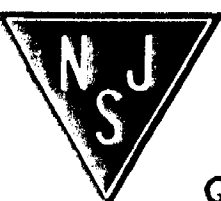
- Designed for color TV horizontal output applications

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	$^\circ C$



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ELECTRICAL CHARACTERISTICS

$T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 8A; I_B= 1.6A$			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 8A; I_B= 1.6A$			1.5	V
I_{CES}	Collector Cutoff Current	$V_{CE}= 1400V; V_{BE}= 0$			1	mA
I_{CBO}	Collector Cutoff Current	$V_{CB}= 800V; I_E= 0$			10	μ A
I_{CBO}	Collector Cutoff Current	$V_{EB}= 4V; I_C= 0$			1	mA
h_{FE-1}	DC Current Gain	$I_C= 1A; V_{CE}= 5V$	15		40	
h_{FE-2}	DC Current Gain	$I_C= 8A; V_{CE}= 5V$	5.3		7.3	
t_f	Fall Time	$I_C= 6A, I_{B1}= 1.2A; I_{B2}= -2.4A;$ $V_{CC}= 200V; R_L= 33.3 \Omega$			0.3	μ s