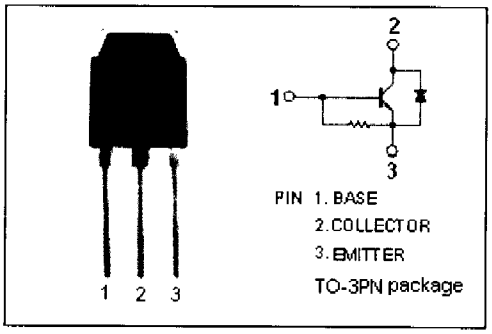
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Silicon NPN Power Transistor — KSD5090

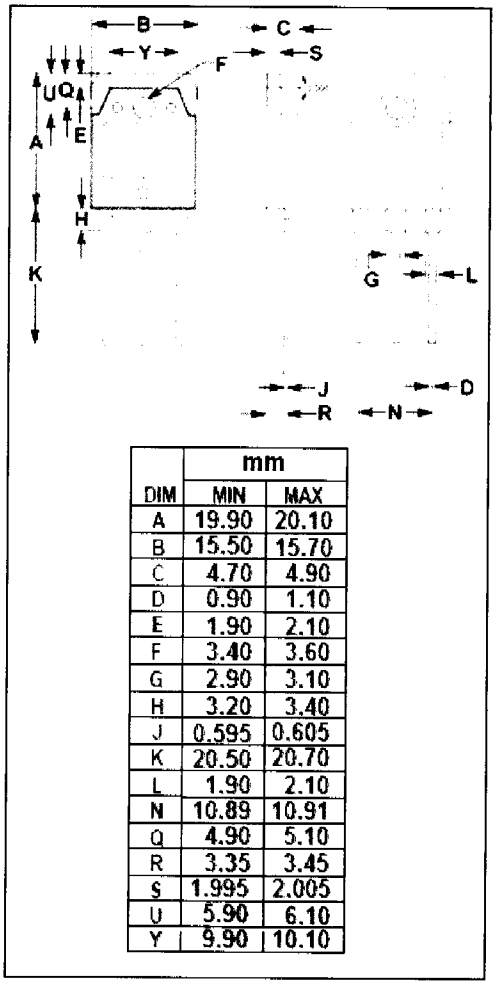


DESCRIPTION

- High Breakdown Voltage-
  : V_{CBO}= 1500V (Min)
- High Switching Speed
- High Reliability
- Built-in Damper Diode

APPLICATIONS

- Designed for color TV horizontal output applicaitions



DIM	mm MIN	mm MAX
A	19.90	20.10
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.10
H	3.20	3.40
J	0.595	0.605
K	20.50	20.70
L	1.90	2.10
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.005
U	5.90	6.10
Y	9.90	10.10

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	8	A
I_{CP}	Collector Current-Peak	30	A
P_C	Collector Power Dissipation @ T_C=25℃	150	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Quality Semi-Conductors

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 6A; I_B= 1.2A			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 6A; I_B= 1.2A			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 800V ; I_E= 0			10	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 4V ; I_C= 0	40		200	mA
h_{FE-1}	DC Current Gain	I_C= 1A ; V_{CE}= 5V	8			
h_{FE-2}	DC Current Gain	I_C= 6A ; V_{CE}= 5V	5			
V_{ECF}	C-E Diode Forward Voltage	I_F= 8A			2.0	V
t_f	Fall Time	I_C= 6A , I_{B1}= 1.2A ; I_{B2}= -2.4A R_L= 33.3Ω ; V_{CC}= 200V			0.3	μs