

Silicon NPN Power Transistor

KSD5065

DESCRIPTION

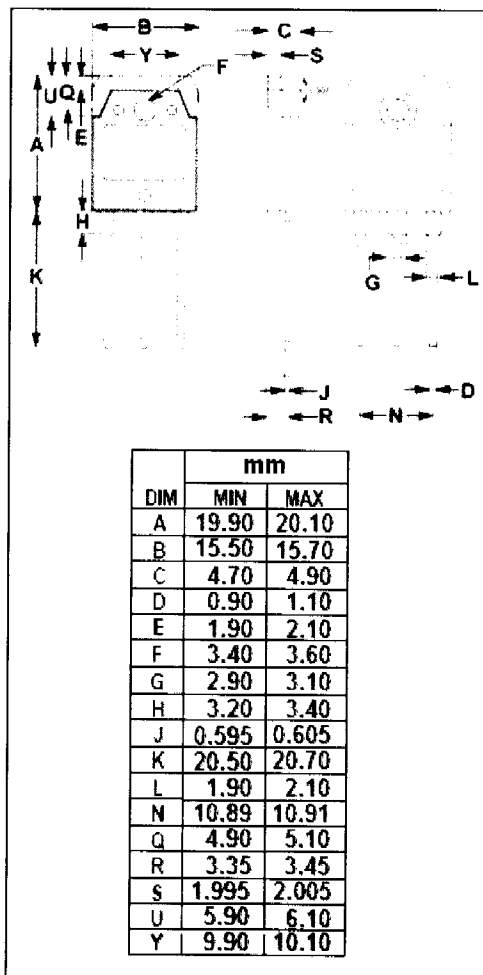
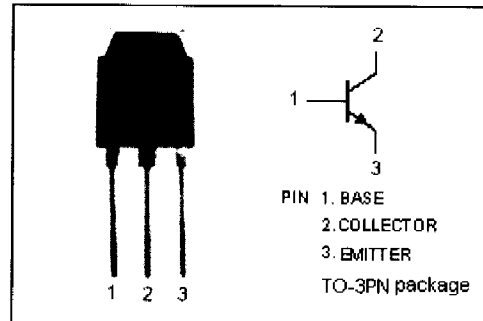
- High Breakdown Voltage-
 : $V_{CBO} = 1500V$ (Min)
- High Switching Speed
- High Reliability

APPLICATIONS

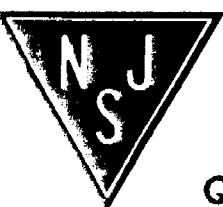
- Designed for color TV horizontal output applications

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	3.5	A
I_{CP}	Collector Current-Peak	10	A
P_C	Collector Power Dissipation @ $T_C=25^\circ C$	80	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



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.



Silicon NPN Power Transistor

KSD5065

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	$I_C=2.5A; I_B=0.8A$			8.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=2.5A; I_B=0.8A$			1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=800V; I_E=0$			10	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5V; I_C=0$			1	mA
h_{FE}	DC Current Gain	$I_C=0.5A; V_{CE}=5V$	8			
f_T	Current-Gain—Bandwidth Product	$I_C=0.5A; V_{CE}=10V$		3		MHZ
t_f	Fall Time	$I_C=3A, I_{B1}=0.8A; I_{B2}=-1.6A$ $R_L=66.7\Omega; V_{CC}=200V$			0.4	μs