

**Silicon NPN Power Transistor**

**KSD5080**

**DESCRIPTION**

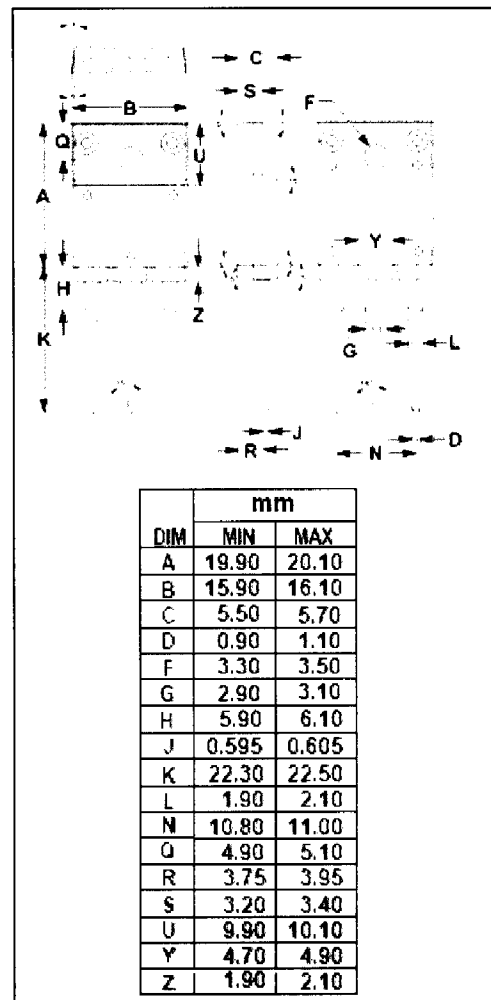
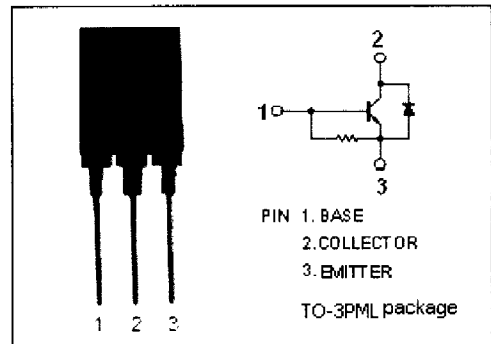
- High Breakdown Voltage-  
 :  $V_{CBO} = 1500V$  (Min)
- High Switching Speed
- High Reliability
- Built-in Damper Diode

**APPLICATIONS**

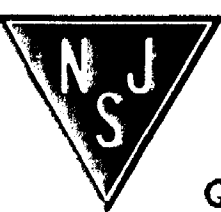
- Designed for color TV horizontal output applications

**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	8	A
$I_{CP}$	Collector Current-Peak	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	$I_C=6A; I_B=1.2A$			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	$\mu\text{A}$
$I_{EBO}$	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	$I_C=6A; I_{B1}=1.2A; I_{B2}=-2.4A$ $R_L=33.3\Omega; V_{CC}=200V$			0.3	$\mu\text{s}$