

isc Silicon NPN Power Transistor

KSD5003

DESCRIPTION

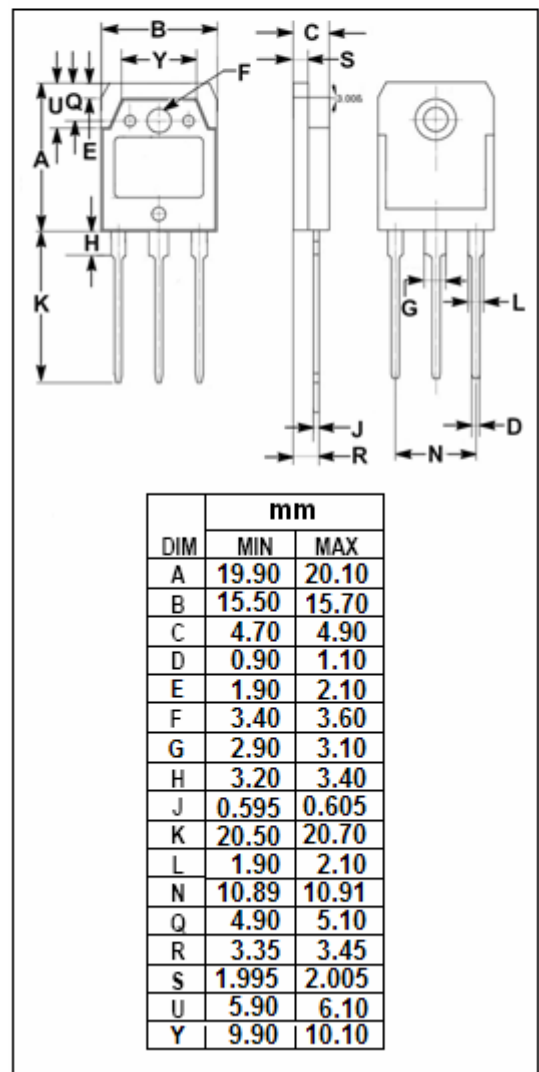
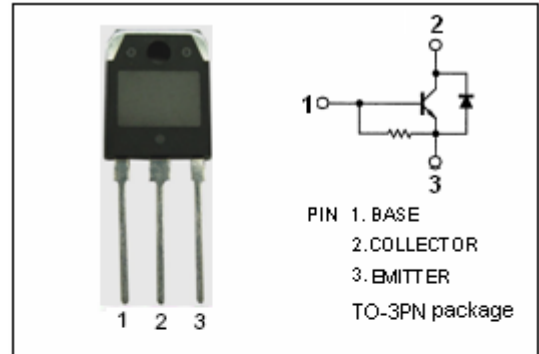
- High Breakdown Voltage-
: $V_{CBO} = 1500V$ (Min)
- High Switching Speed
- High Reliability
- Built-in Damper Diode

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	7	V
I_C	Collector Current- Continuous	6	A
I_{CP}	Collector Current-Peak	16	A
P_C	Collector Power Dissipation @ $T_c=25^\circ C$	120	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°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 5A; I _B = 1A			5.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 5A; I _B = 1A			1.5	V
I _{CB0}	Collector Cutoff Current	V _{CB} = 800V ; I _E = 0			10	μ A
I _{EB0}	Emitter Cutoff Current	V _{EB} = 4V ; I _C = 0	40		130	mA
h _{FE}	DC Current Gain	I _C = 1A ; V _{CE} = 5V	8			
f _T	Current-Gain—Bandwidth Product	I _C = 1A; V _{CE} = 10V		3		MHz
V _{ECF}	C-E Diode Forward Voltage	I _F = 6A			2.0	V
t _f	Fall Time	I _C = 5A , I _{B1} = 1A ; I _{B2} = -2A R _L = 40 Ω ; V _{CC} = 200V			0.4	μ s