

isc Silicon NPN Power Transistors
2SD5071
DESCRIPTION

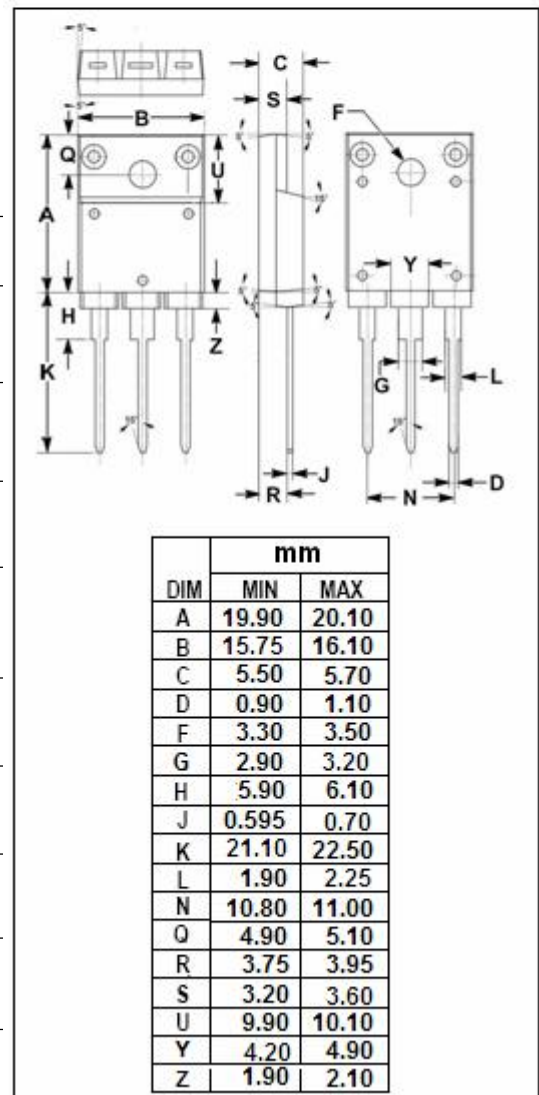
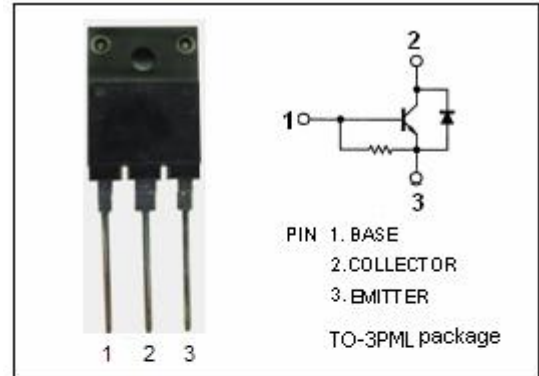
- High Breakdown Voltage-
: $V_{CBO} = 1500V$ (Min)
- High Switching Speed
- High Reliability
- Built-in Damper Diode
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in horizontal deflection circuits of colour TV receivers.

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_{CM}	Collector Current-Peak	10	A
P_C	Collector Power Dissipation @ $T_c = 25^\circ C$	50	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-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 = 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 _{EBO}	Emitter Cutoff Current	V _{EB} = 4V; I _C =0	40		200	mA
I _{CBO}	Collector-Base Cutoff Current	V _{CB} =800V; I _E = 0			10	uA
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
V _{ECF}	C-E Diode Forward Voltage	I _F = 3.5A			2.0	V
t _f	Fall Time	I _C = 3A, I _{B1} = 0.8A; I _{B2} = -1.6A R _L = 66.7 Ω ;V _{CC} = 200V			0.4	us

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