

isc Silicon NPN Power Transistor**2SD2047****DESCRIPTION**

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

APPLICATIONS

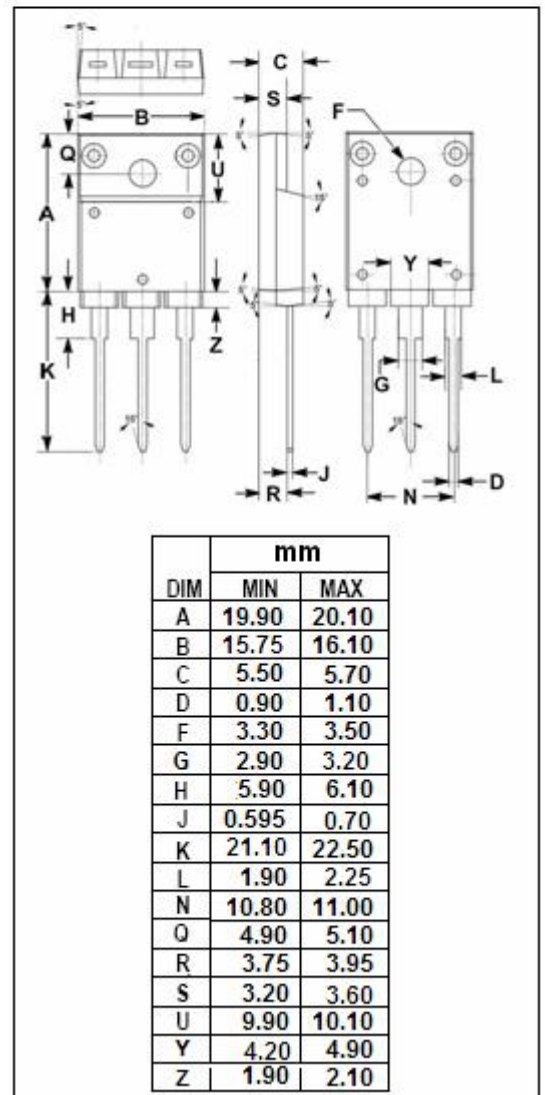
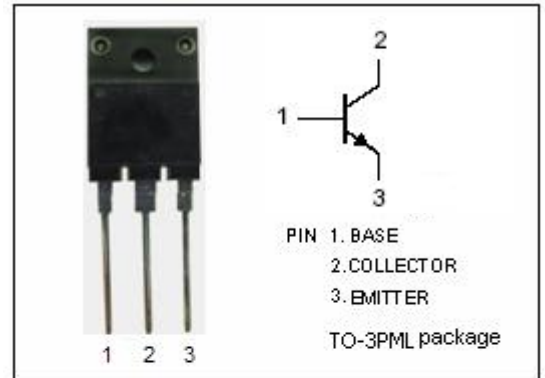
- Color TV horizontal deflection output
- Color display horizontal deflection output

ABSOLUTE MAXIMUM RATINGS($T_a = 25^\circ C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	700	V
V_{EBO}	Emitter-Base Voltage	10	V
I_C	Collector Current- Continuous	5	A
I_{CP}	Collector Current-Pulse	10	A
I_B	Base Current- Continuous	3	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	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.55	$^\circ C/W$



isc Silicon NPN Power Transistor**2SD2047****ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 10mA; I _B = 0	700			V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 1mA; I _E = 0	1500			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 1mA; I _C = 0	10			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 4.5A; I _B = 2.0A			2.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 4.5A; I _B = 2.0A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 750V ; I _E = 0			50	μ A
		V _{CB} = 1500V ; I _E = 0			1.0	mA
h _{FE}	DC Current Gain	I _C = 1A ; V _{CE} = 5V	18		50	

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