

isc Silicon NPN Power Transistors

2SC4941

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 800V(\text{Min})$
- Fast Switching speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

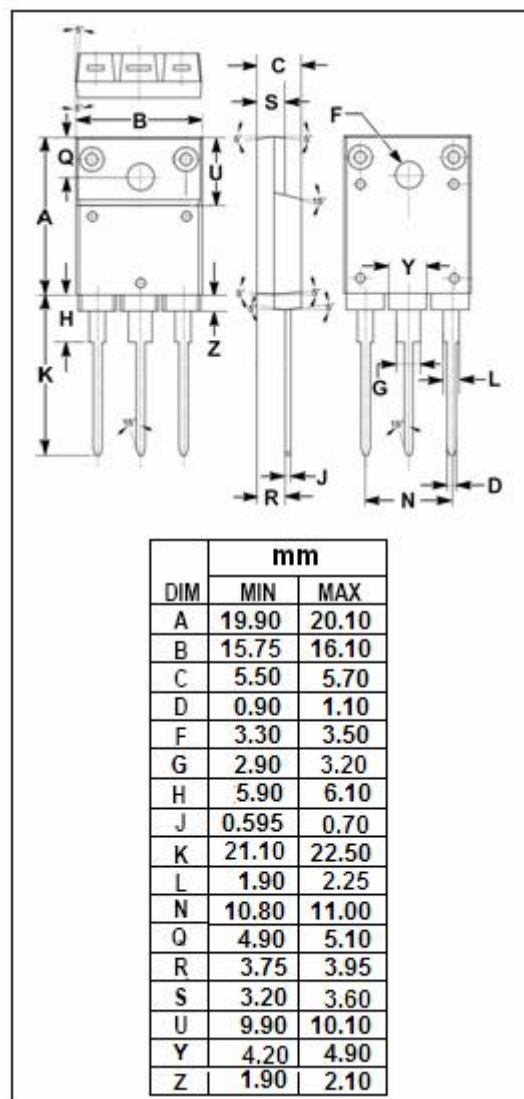
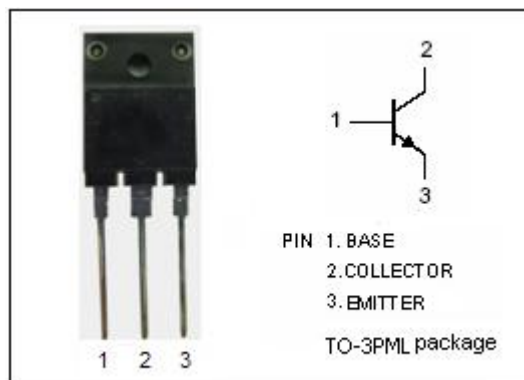
- Color TV horizontal deflection output applications
- Color display horizontal deflection output applications

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

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	12	A
I_B	Base Current-Continuous	3	A
I_{BP}	Base Current-Peak	6	A
P_T	Total Power Dissipation @ $T_C=25^\circ\text{C}$	65	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.92	$^\circ\text{C/W}$



isc Silicon NPN Power Transistors**2SC4941****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-Emitter Sustaining Voltage	I _C =50mA; I _B = 0	800			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 3A; I _B = 0.6A			0.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 3A; I _B = 0.6A			1.5	V
I _{CBO}	Collector Cutoff Current	At rated Voltage			100	μ A
I _{CEO}	Collector Cutoff Current	At rated Voltage			100	μ A
I _{EBO}	Emitter Cutoff Current	At rated Voltage			100	μ A
h _{FE-1}	DC Current Gain	I _C = 1A ; V _{CE} = 5V	15			
h _{FE-2}	DC Current Gain	I _C = 1mA ; V _{CE} = 5V	7			
f _T	Current-Gain—Bandwidth Product	I _C = 0.6A ; V _{CE} = 10V		8		MHz

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