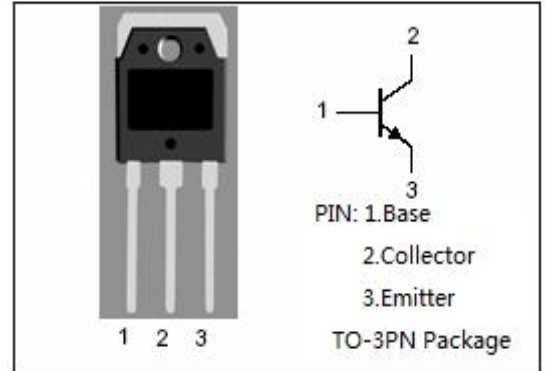


isc Silicon NPN Power Transistor
2SC4237
DESCRIPTION

- 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

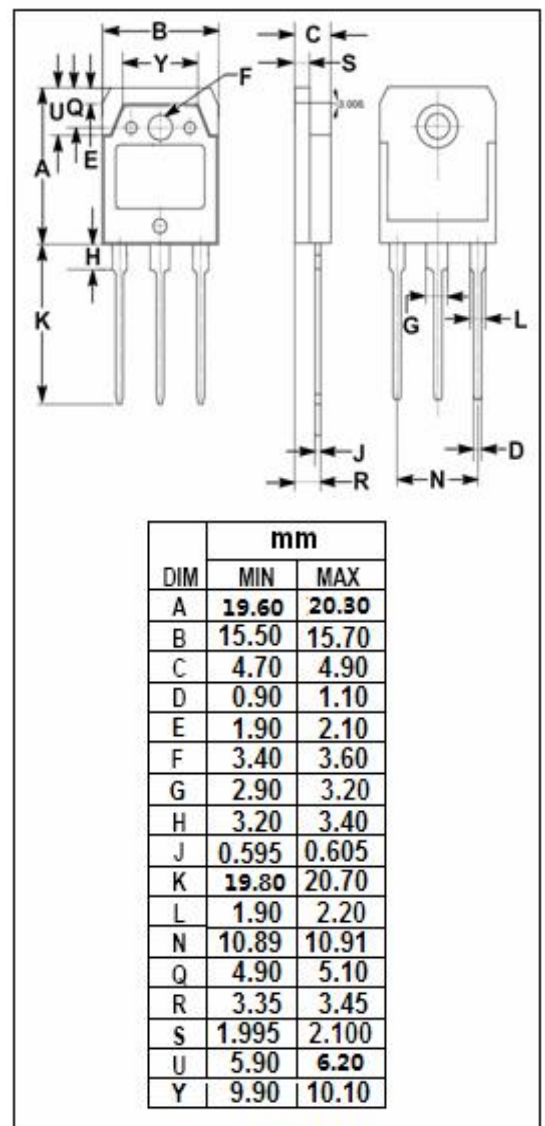
- Color TV horizontal output applications


ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1200	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	10	A
I_{CM}	Collector Current-Peak	20	A
I_B	Base Current-Continuous	4	A
I_{BM}	Base Current-Peak	8	A
P_T	Total Power Dissipation @ $T_C=25^\circ\text{C}$	150	W
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature Range	-55~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	0.83	°C/W



isc Silicon NPN Power Transistor
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ELECTRICAL CHARACTERISTICS

 T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE0(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 10mA; I _B = 0	800			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 5A; I _B = 1A			1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 5A; I _B = 1A			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 = 5A ; V _{CE} = 5V	8			
h _{FE-2}	DC Current Gain	I _C = 1mA ; V _{CE} = 5V	5			
f _T	Current-Gain—Bandwidth Product	I _C = 1A ; V _{CE} = 10V		8		MHZ

Switching times

t _{on}	Turn-on Time				0.5	μ s
t _{stg}	Storage Time	I _C = 5A , I _{B1} = 1A; I _{B2} = -2A R _L = 50 Ω ; V _{BB2} = 4V			3.5	μ s
t _f	Fall Time				0.3	μ s

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