

isc Silicon NPN Power Transistor

2SC4111

DESCRIPTION

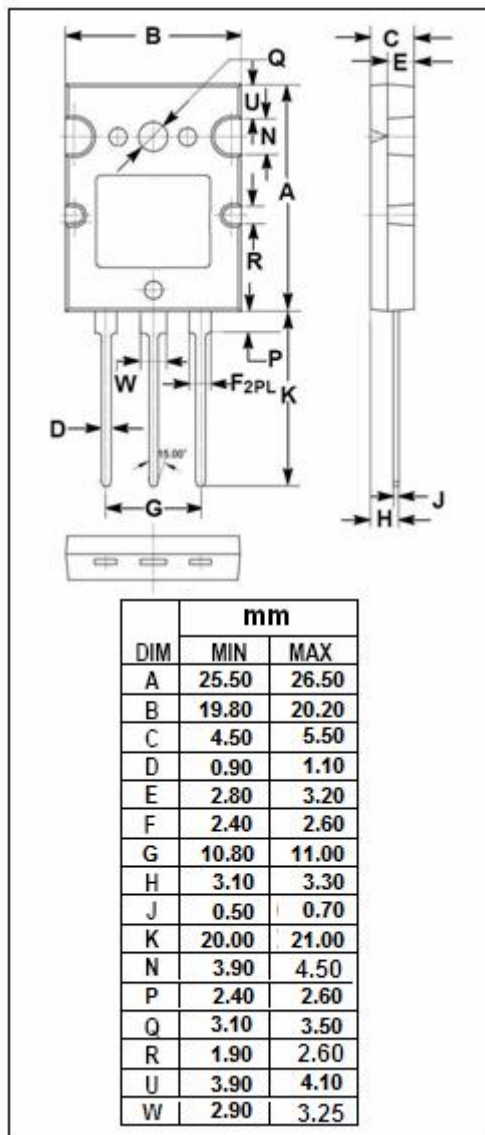
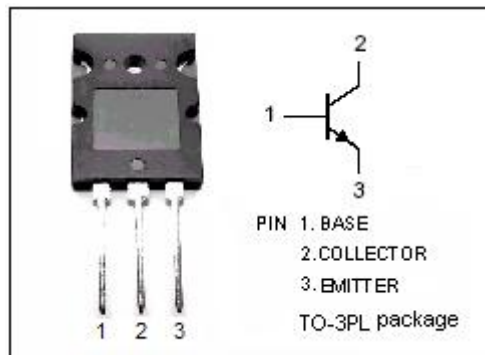
- High Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 800V(\text{Min})$
- High Switching Speed
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for horizontal output applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CES}	Collector-Emitter Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	700	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	10	A
I_{CM}	Collector Current-Pulse	22	A
I_B	Base Current-Continuous	3.5	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	150	W
	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	3.5	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SC4111****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 1mA; I _B = 0	7			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 7A; I _B = 2.5A			5.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 7A; I _B = 2.5A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 750V; I _E = 0 V _{CB} = 1500V; I _E = 0			10 1.0	μ A mA
h _{FE-1}	DC Current Gain	I _C = 1A; V _{CE} = 5V	5			
h _{FE-2}	DC Current Gain	I _C = 7A; V _{CE} = 5V	3		8	
f _T	Current-Gain—Bandwidth Product	I _C = 1A; V _{CE} = 10V		2		MHz

Switching times

t _{stg}	Storage Time	I _C = 6A, I _{B1} = -I _{B2} = 1.7A; I _{leak} = 5 μ H			12	μ s
t _f	Fall Time				0.6	μ s

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