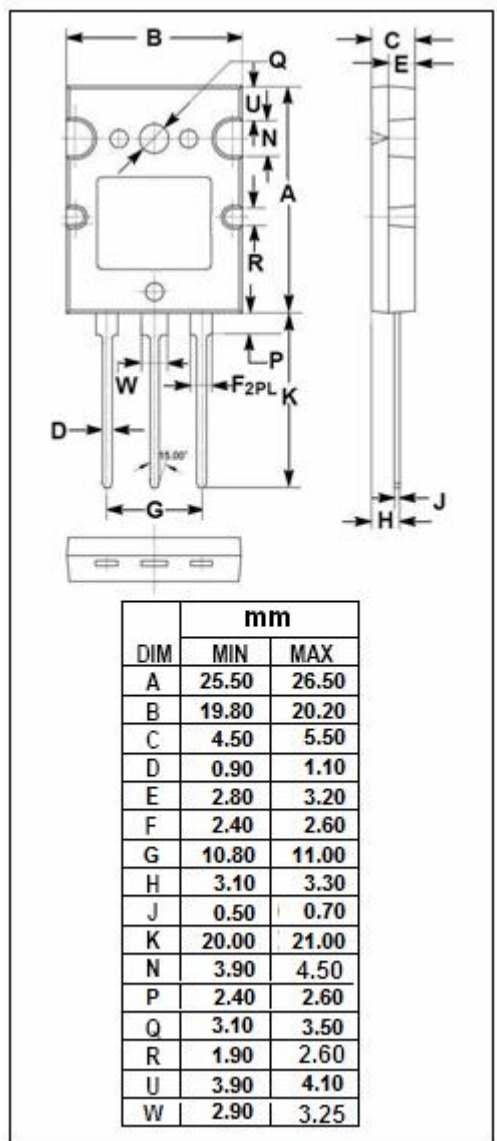
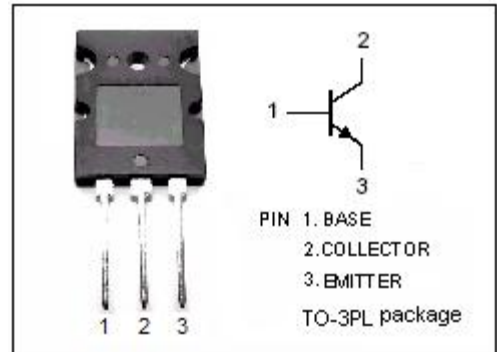


isc Silicon NPN Power Transistor
2SC3714
DESCRIPTION

- High Switching Speed
- High Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 400V(\text{Min})$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	500	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	20	A
I_{CM}	Collector Current-Pulse	40	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	200	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SC3714****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 = 10A; I _B =2A			1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 10A; I _B =2A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 500V; I _E = 0			100	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 6V; I _C = 0			0.1	mA
h _{FE-1}	DC Current Gain	I _C = 10A; V _{CE} = 2V	10		40	
f _T	Current-Gain—Bandwidth Product	I _C = 2A; V _{CE} = 10V	20			MHZ

Switching times

t _{on}	Turn-on Time	I _C = 10A , I _{B1} = -I _{B2} = 2A R _L = 15 Ω ; V _{CC} =150V,V _{BB2} =4V			0.5	μ s
t _{stg}	Storage Time				2.0	μ s
t _f	Fall Time				0.3	μ s

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