

isc Silicon NPN Power Transistor
2SC3074
DESCRIPTION

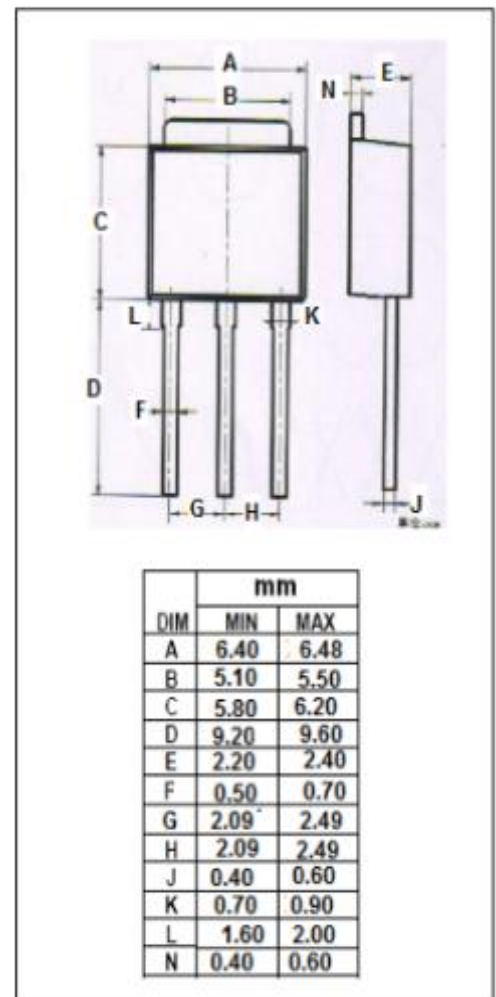
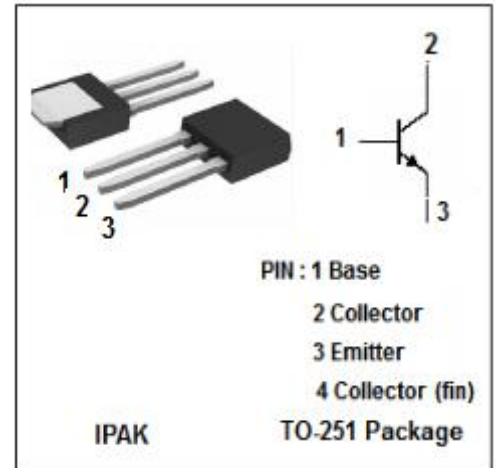
- With TO-251(IPAK) packaging
- Excellent linearity of h_{FE}
- Low collector-to-emitter saturation voltage
- Fast switching speed
- Complementary to 2SA1244
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Relay drivers, high-speed inverters , converters and Other general high current switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	5	A
I_B	Base Current-Continuous	1	A
P_C	Collector Power Dissipation	1	W
	Collector Power Dissipation @ $T_c=25^{\circ}\text{C}$	20	
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$



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ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
BV _{CEO}	Collector-Emitter Breakdown Voltage	I _C =10mA; I _B =0	50			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C =3A; I _B =0.15A		200	400	mV
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C =3A; I _B =0.15A		0.9	1.2	V
I _{CB0}	Collector Cutoff Current	V _{CB} = 40V; I _E = 0			1.0	μ A
I _{EB0}	Emitter Cutoff Current	V _{EB} = 5V; I _C =0			1.0	μ A
h _{FE-1}	DC Current Gain	I _C = 1A ; V _{CE} = 1V	70		240	
h _{FE-2}	DC Current Gain	I _C = 3A ; V _{CE} = 1V	30			

◆ h_{FE-1} Classifications

O	Y
70-140	120-240

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