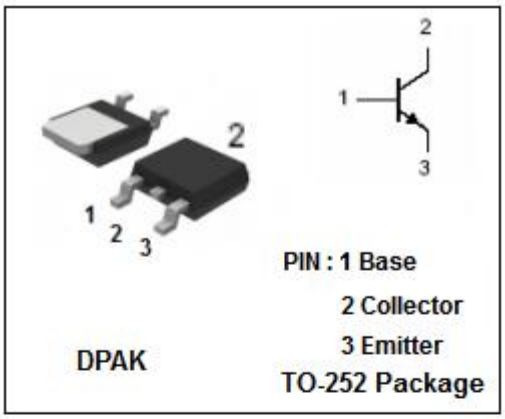
isc Silicon NPN Power Transistor — 2SC3074

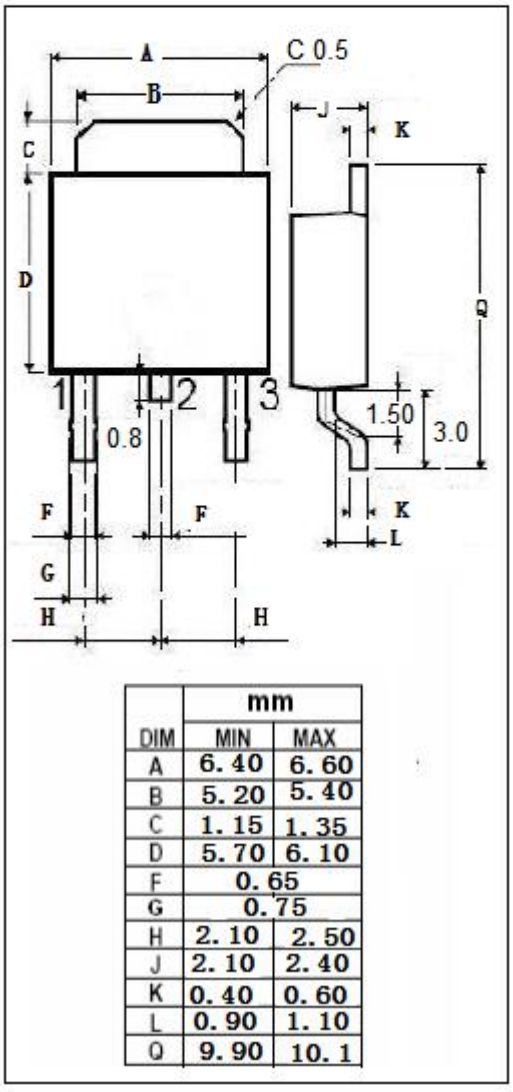


DESCRIPTION

- With TO-252(DPAK) 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



DIM	mm MIN	MAX
A	6.40	6.60
B	5.20	5.40
C	1.15	1.35
D	5.70	6.10
F	0.65	
G	0.75	
H	2.10	2.50
J	2.10	2.40
K	0.40	0.60
L	0.90	1.10
Q	9.90	10.1

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

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℃	20	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ 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_{CBO}	Collector Cutoff Current	V_{CB}= 40V; I_E= 0			1.0	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C=0			1.0	μA
h_{FE-1}	DC Current Cain	I_C= 1A ; V_{CE}= 1V	70		240	
h_{FE-2}	DC Current Cain	I_C= 3A ; V_{CE}= 1V	30			

◆ **h_{FE-1}Classifications**

O	Y
70-140	120-240