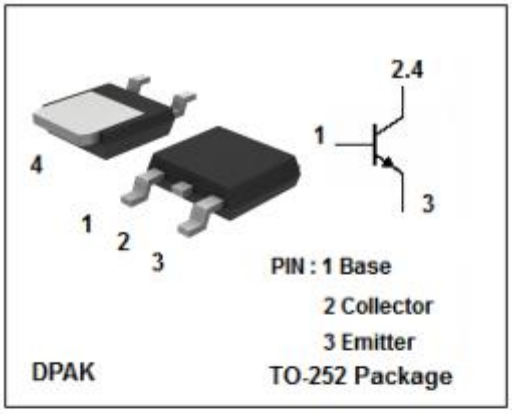
isc Silicon NPN Power Transistor — FJD3076

DESCRIPTION

- Low collector saturation voltage
- High current gain characteristics
- Fast-switching speed
- 100% tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

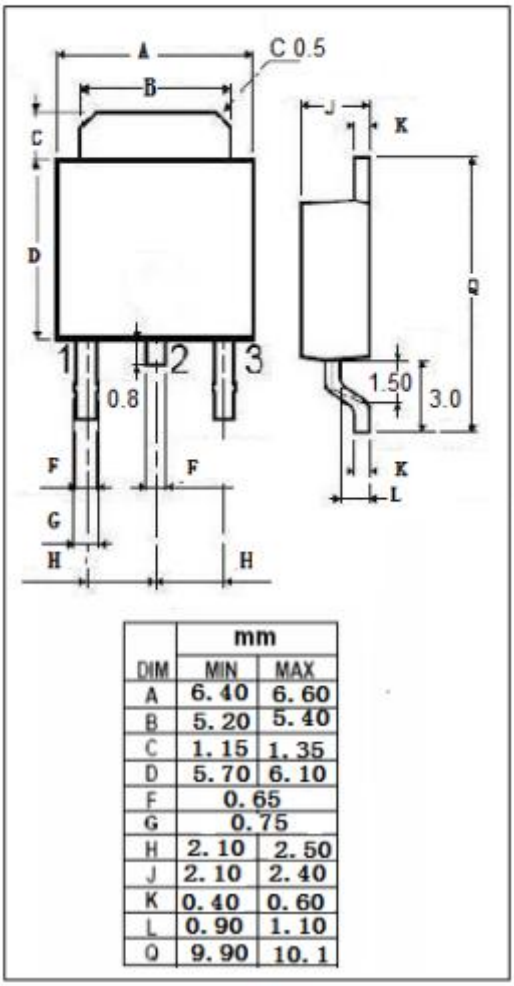


APPLICATIONS

- Power amplifier application

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	32	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	2	A
P_C	Collector Power Dissipation (Ta=25℃)	1	W
P_C	Collector Power Dissipation (Tc=25℃)	10	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



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

isc Silicon NPN Power Transistor FJD3076

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 2A; I_B= 200mA			0.8	V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 50uA; I_B= 0	40			V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 1mA; I_B= 0	32			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 50uA; I_C= 0	5			V
I_{EBO}	Emitter Cutoff Current	V_{EB}= 4V; I_C= 0			1	uA
I_{CBO}	Collector Cutoff Current	V_{CB}= 20V; I_E= 0			1	uA
h_{FE}	DC Current Gain	I_C= 0.5A; V_{CE}= 3V	130		390	
f_T	Current-Gain—Bandwidth Product	I_C= 500mA; V_{CE}= 5V		100		MHz
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= 10V; f= 1.0MHz		50		pF