

isc Silicon NPN Power Transistor

FJD3076

DESCRIPTION

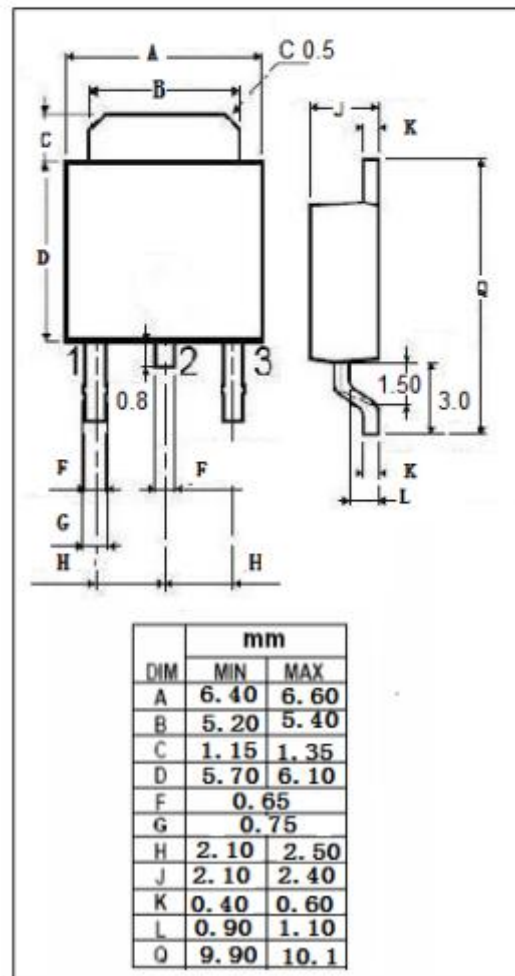
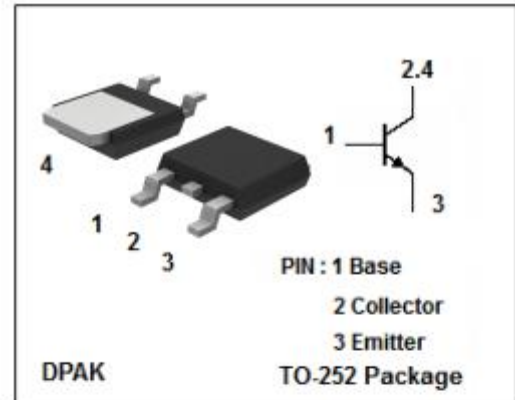
- Low collector saturation voltage
- High current gain characteristics
- Fast-switching speed
- 100% tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Power amplifier application

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

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 ($T_a=25^{\circ}\text{C}$)	1	W
P_C	Collector Power Dissipation ($T_c=25^{\circ}\text{C}$)	10	W
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
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

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