

isc Silicon NPN Power Transistor
2SC3076
DESCRIPTION

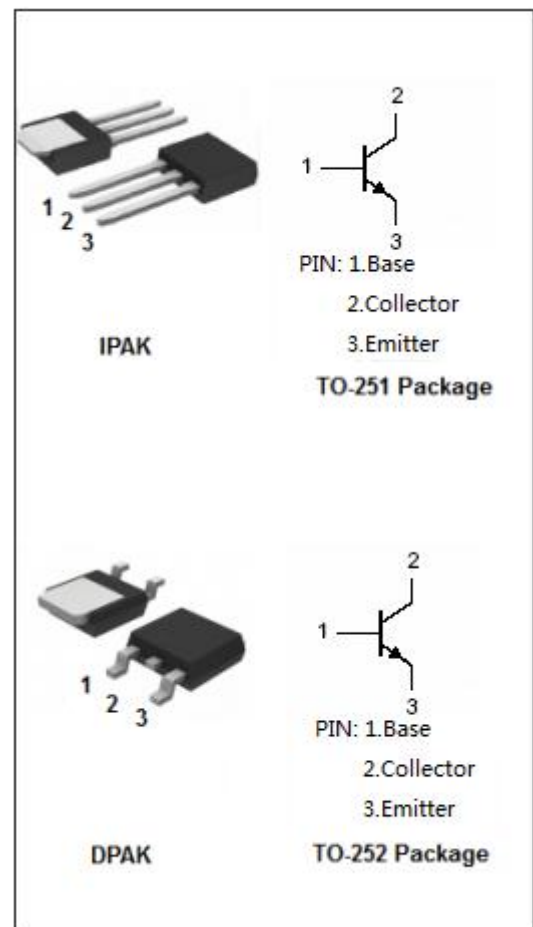
- Collector-Emitter Saturation Voltage-
: $V_{CE(sat)} = 0.5V$ (Max.)@ $I_C = 1A$
- Complementary to 2SA1241
- 100% tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Power amplifier application
- Power switching application

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	2	A
I_B	Base Current	1	A
P_C	Collector Power Dissipation $T_a=25^\circ C$	1.0	W
P_C	Collector Power Dissipation $T_c=25^\circ C$	10	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



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ELECTRICAL CHARACTERISTICS

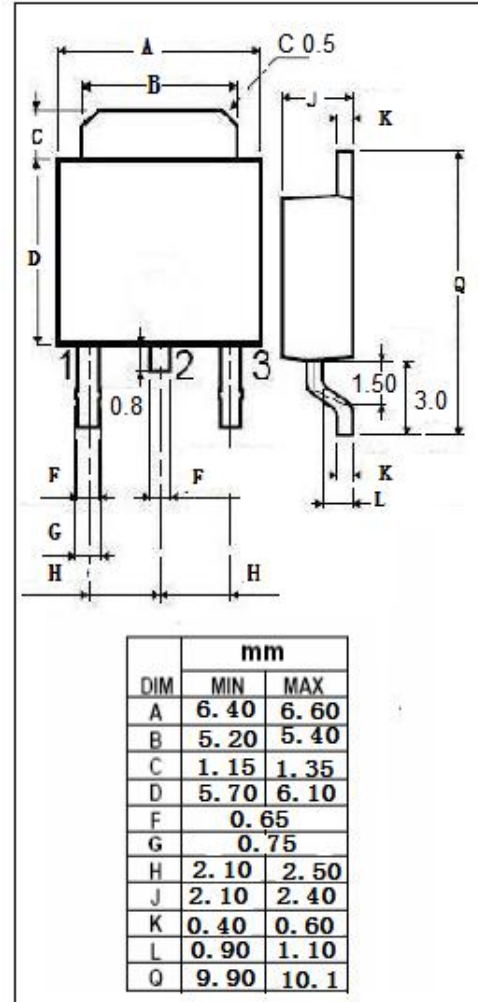
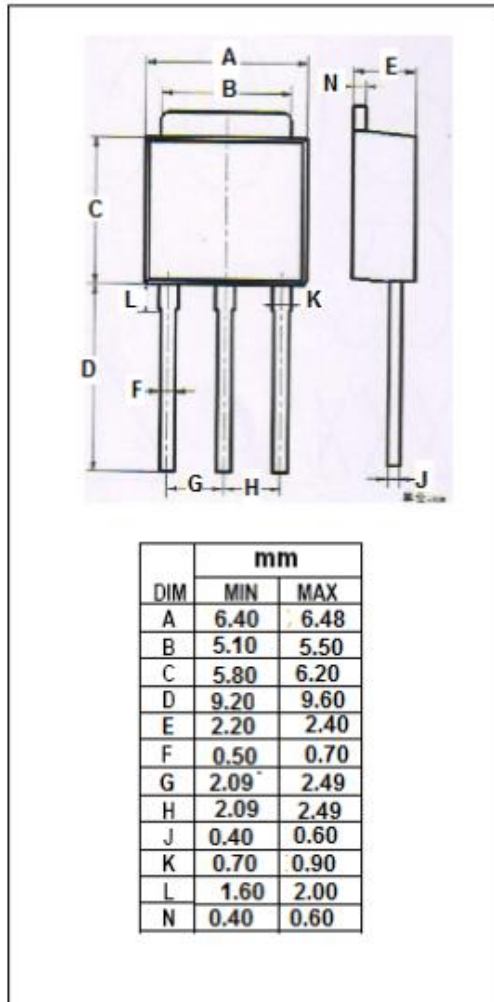
 T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 1A; I _B = 50mA			0.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 1A; I _B = 50mA			1.2	V
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 10mA; I _B = 0	50			V
I _{CBO}	Collector Cutoff Current	V _{CB} = 50V; I _E = 0			1	uA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			1	uA
h _{FE-1}	DC Current Gain	I _C = 0.5A; V _{CE} = 2V	70		240	
h _{FE-2}	DC Current Gain	I _C = 1.5A; V _{CE} = 2V	40			
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V; f= 1.0MHz		30		pF
f _T	Current-Gain—Bandwidth Product	I _C = 0.5A; V _{CE} =2V		80		MHz

◆ h_{FE-1} Classifications

O	Y
70-140	120-240

Outline Drawing



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