

isc Silicon PNP Power Transistor
NSS1C300E
DESCRIPTION

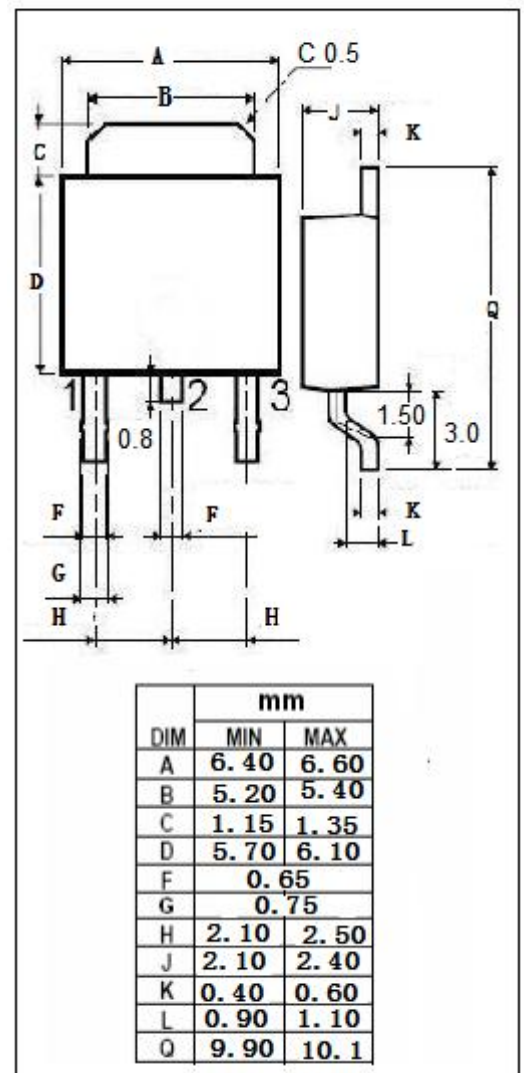
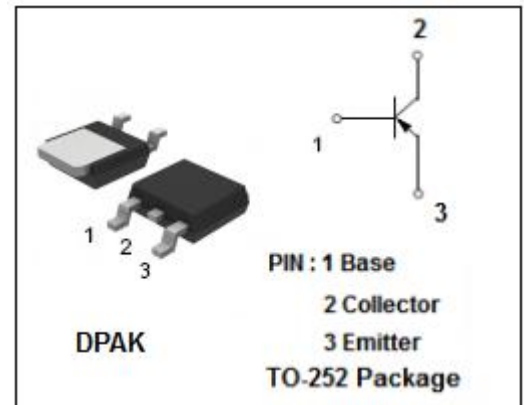
- With TO-252(DPAK) packaging
- Large collector current
- Low collector saturation voltage
- High power dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in DC-DC converter
- Driver of solenoid or motor

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	-140	V
V _{CEO}	Collector-Emitter Voltage	-100	V
V _{EBO}	Emitter-Base Voltage	-6	V
I _C	Collector Current-Continuous	-3	A
I _{CP}	Collector Current-Pulse	-6	A
I _B	Base Current-Continuous	-0.5	A
P _C	Collector Power Dissipation @ T _C =25°C	33	W
	Collector Power Dissipation @ T _a =25°C	0.26	
T _J	Junction Temperature	-65~150	°C
T _{stg}	Storage Temperature Range	-65~150	°C



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ELECTRICAL CHARACTERISTICS

 T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = -0.1A; I _B = -10mA			-0.07	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = -1.0A; I _B = -0.1A			-0.15	V
V _{CE(sat)-3}	Collector-Emitter Saturation Voltage	I _C = -2.0A; I _B = -0.2A			-0.25	V
V _{CE(sat)-4}	Collector-Emitter Saturation Voltage	I _C = -3.0A; I _B = -0.3A			-0.40	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -1A; I _B = -0.1A			-1.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -1A; V _{CE} =-2V			-0.9	V
V _{CBO}	Collector-Base Breakdown Voltage	I _C = -0.1mA; I _B = 0	-140			
V _{CEO}	Collector-Emitter Breakdown Voltage	I _C =-10mA; I _E =0	-100			
V _{EBO}	Emitter-Base Breakdown Voltage	I _E =-0.1mA; I _B = 0	-6			
I _{CBO}	Collector Cutoff Current	V _{CB} = -140V; I _E = 0			-100	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0			-100	μ A
h _{FE-1}	DC Current Gain	I _C = -0.1A; V _{CE} = -2V	180			
h _{FE-2}	DC Current Gain	I _C = -0.5A; V _{CE} = -2V	180			
h _{FE-3}	DC Current Gain	I _C = -1.0A; V _{CE} = -2V	120		360	
h _{FE-4}	DC Current Gain	I _C = -3.0A; V _{CE} = -2V	50			

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