

isc Silicon PNP Power Transistor

2SA1413-Z

DESCRIPTION

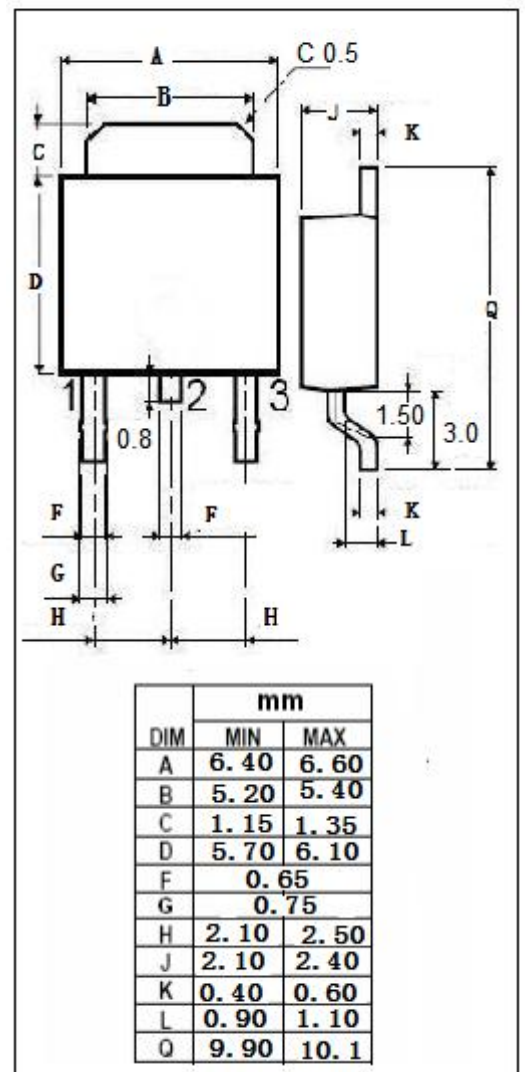
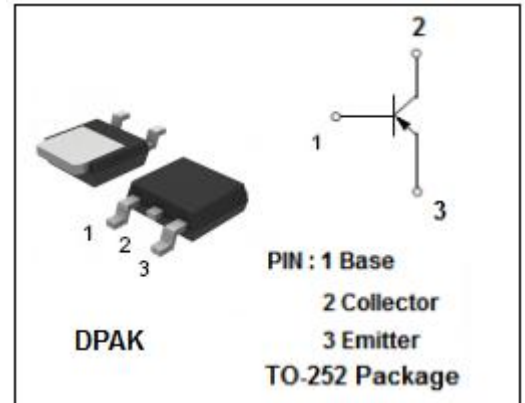
- With TO-252(DPAK) packaging
- Large collector current
- Low collector saturation voltage
- High power dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

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

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-600	V
V_{CEO}	Collector-Emitter Voltage	-600	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-1	A
I_{CP}	Collector Current-Pulse	-2	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}\text{C}$	2	W
T_J	Junction Temperature	-55~150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$



isc Silicon PNP Power Transistor**2SA1413-Z****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 = -0.3A; I _B = -0.06A			-1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -0.3A; I _B = -0.06A			-1.2	V
V _{CBO}	Collector-Base Breakdown Voltage	I _C = -0.1mA; I _B = 0	-600			
V _{CEO}	Collector-Emitter Breakdown Voltage	I _C = -10mA; I _E =0	-600			
V _{EBO}	Emitter-Base Breakdown Voltage	I _E = -0.1mA; I _B = 0	-7			
I _{CBO}	Collector Cutoff Current	V _{CB} = -600V; I _E = 0			-10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -7V; I _C = 0			-10	μ A
h _{FE-1}	DC Current Gain	I _C = -0.1A; V _{CE} = -5V	30		120	
h _{FE-2}	DC Current Gain	I _C = -0.5A; V _{CE} = -5V	5			

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