

ISC Silicon NPN Power Transistor

ISC2319

DESCRIPTION

- High Voltage Capability
- High Current Capability
- Fast Switching Speed

APPLICATIONS

Designed for high-voltage,high-speed, power switching in inductive circuits where fall time is critical. They are particularly suited for line-operated switchmode applications such as:

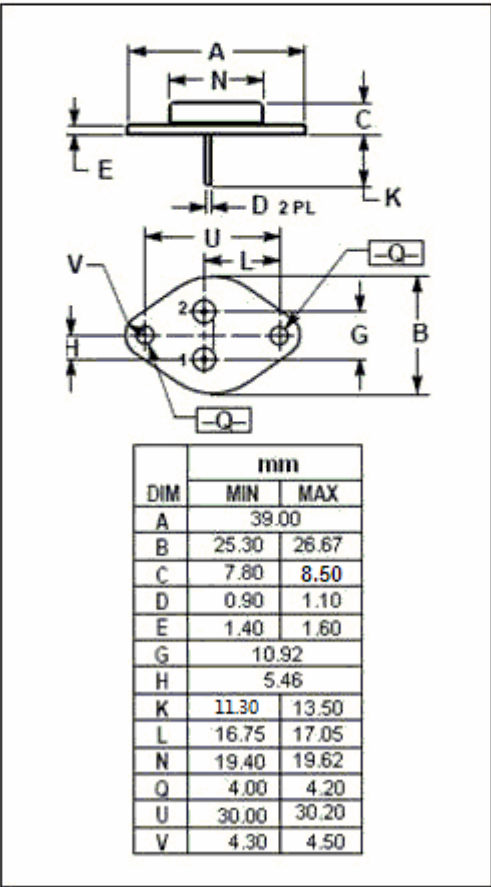
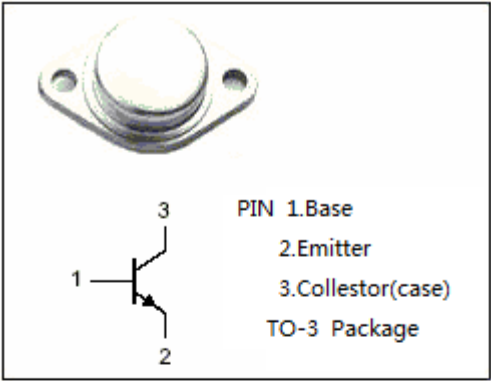
- Switching regulators
- Inverters
- Solenoid and relay drivers
- Motor controls
- Deflection circuits

Absolute maximum ratings(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	850	V
V _{CEO}	Collector-Emitter Voltage	450	V
V _{EBO}	Emitter-Base Voltage	6	V
I _C	Collector Current-Continuous	15	A
I _{CM}	Collector Current-Peak	20	A
I _B	Base Current-Continuous	10	A
I _{BM}	Base Current-peak	15	A
P _C	Collector Power Dissipation @T _C =25℃	175	W
T _J	Junction Temperature	200	℃
T _{stg}	Storage Temperature Range	-65~200	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance,Junction to Case	1.0	℃/W



isc Silicon NPN Power Transistor**ISC2319****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 50mA ; I _B = 0	450		V
V _{CE(sat)} -1	Collector-Emitter Saturation Voltage	I _C = 5A ; I _B = 0.7A		2.5	V
V _{CE(sat)} -2	Collector-Emitter Saturation Voltage	I _C = 10A; I _B = 1.3A I _C = 10A; I _B = 1.3A; T _C = 100°C		3.0 3.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 10A; I _B = 1.3A I _C = 10A; I _B = 1.3A; T _C = 100°C		1.5 1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} =850V; I _E = 0 V _{CB} =850V; I _E = 0; T _C =100°C		0.25 1.5	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 6V; I _C = 0		1	mA
h _{FE}	DC Current Gain	I _C = 15A ; V _{CE} = 5V	5		