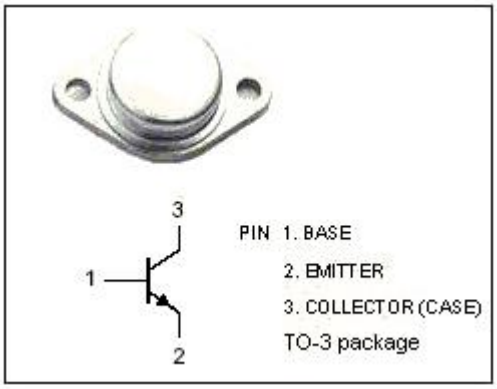
isc Silicon NPN Power Transistor GSRU15040

DESCRIPTION

- High DC Current Gain-
  : h_{FE}= 10(MIN)@I_C= 15A
- Low Collector Saturation Voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

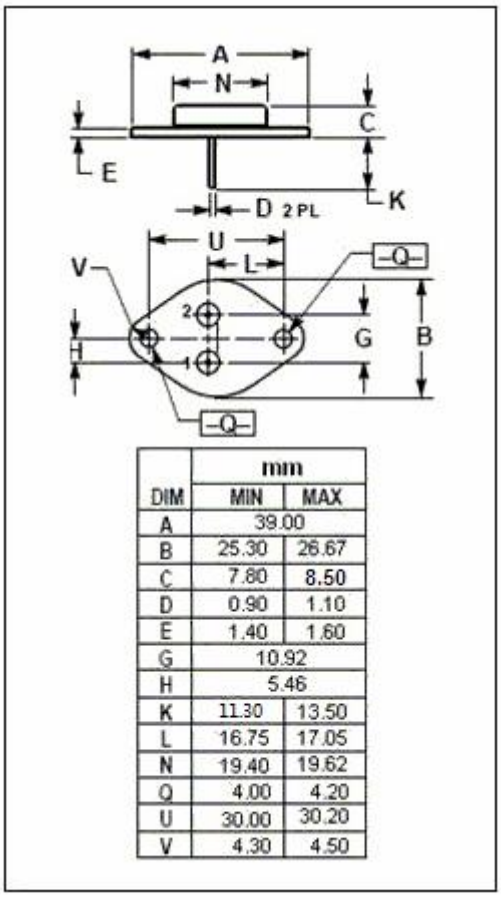


APPLICATIONS

- Power Supplies
- Switching Amplifiers
- Inverters/Converters

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	500	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	8	V
I_C	Collector Current-Continuous	20	A
I_{CM}	Peak Collector Current	30	A
I_B	Base Current-Continuous	10	A
P_C	Collector Power Dissipation@T_C=25℃	175	W
T_J	Junction Temperature	-65~200	℃
T_{stg}	Storage Temperature Range	-65~200	℃



DIM	mm MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.50
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.30	13.50
L	16.75	17.05
N	19.40	19.62
Q	4.00	4.20
U	30.00	30.20
V	4.30	4.50

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.0	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C=50mA; I_B=0	400			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C=15A; I_B=3A			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C=15A; I_B=3A			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}=400V; I_E=0			10	μA
I_{EBO}	Emitter Cutoff current	V_{EB}=5V; I_C=0			10	μA
h_{FE}	DC Current Gain	I_C=15A ; V_{CE}=5V	10			