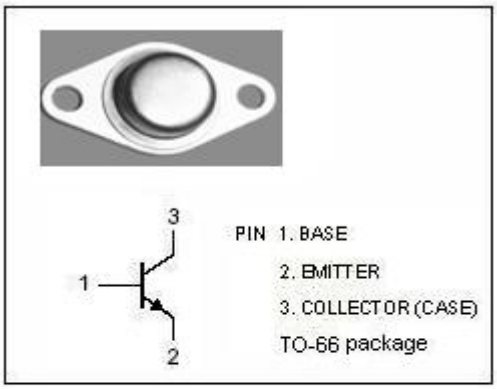
isc Silicon NPN Power Transistor 2N6235

DESCRIPTION

- High Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$= 325V(Min)
- DC Current Gain-
  : h_{FE} = 25-125@ I_C= 1A
- Low Collector-Emitter Saturation Voltage-
  : $V_{CE(sat)}$= 0.5V(Max)@ I_C = 1A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

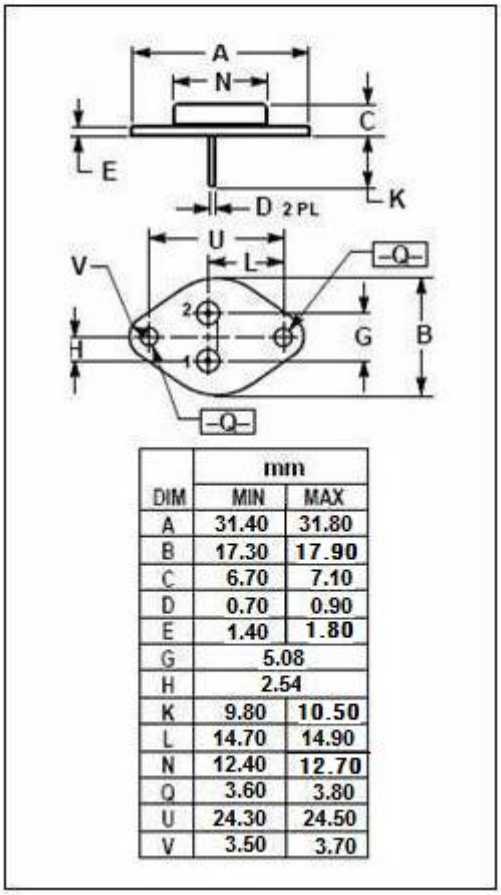
- Designed f for high-voltage medium power and switching reguators applications .

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	350	V
V_{CEO}	Collector-Emitter Voltage	325	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	5	A
I_{CM}	Collector Current-Peak	10	A
I_B	Base Current	2	A
P_C	Collector Power Dissipation@T_C=25℃	50	W
T_J	Junction Temperature	200	℃
T_{stg}	Storage Temperature	-65~200	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	3.5	℃/W



DIM	mm MIN	MAX
A	31.40	31.80
B	17.30	17.90
C	6.70	7.10
D	0.70	0.90
E	1.40	1.80
G	5.08	
H	2.54	
K	9.80	10.50
L	14.70	14.90
N	12.40	12.70
Q	3.60	3.80
U	24.30	24.50
V	3.50	3.70

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 20mA ; I_B= 0	325		V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= 1A; I_B= 0.1A		0.5	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= 5A; I_B= 1.0A		2.5	V
$V_{BE(sat)-1}$	Base-Emitter Saturation Voltage	I_C=1A; I_B= 0.1A		1.0	V
$V_{BE(sat)-2}$	Base-Emitter Saturation Voltage	I_C=5A; I_B= 1.0A		2.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= 1A ; V_{CE}= 5V		1.0	V
I_{CEO}	Collector Cutoff Current	V_{CE}= 325V; I_B= 0		1.0	mA
I_{CBO}	Collector Base Cutoff Current	V_{CB}=350V; I_E= 0		0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 6V; I_C=0		0.1	mA
h_{FE-1}	DC Current Gain	I_C= 0.1A ; V_{CE}= 5V	25		
h_{FE-2}	DC Current Gain	I_C= 1A ; V_{CE}= 5V	25	125	
h_{FE-3}	DC Current Gain	I_C= 3A ; V_{CE}= 5V	10		
f_T	Current-Gain—Bandwidth Product	I_C= 0.25A ; V_{CE}= 10V; f_{test}= 10MHz	20		MHz
C_{OB}	Output Capacitance	I_E= 0 ; V_{CB}= 10V; f_{test}= 0.1MHz		250	pF

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