

isc Silicon NPN Power Transistor

BU118

DESCRIPTION

- Excellent Safe Operating Area
 $V_{CE}: 200V$
 $I_{CM}: 7A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

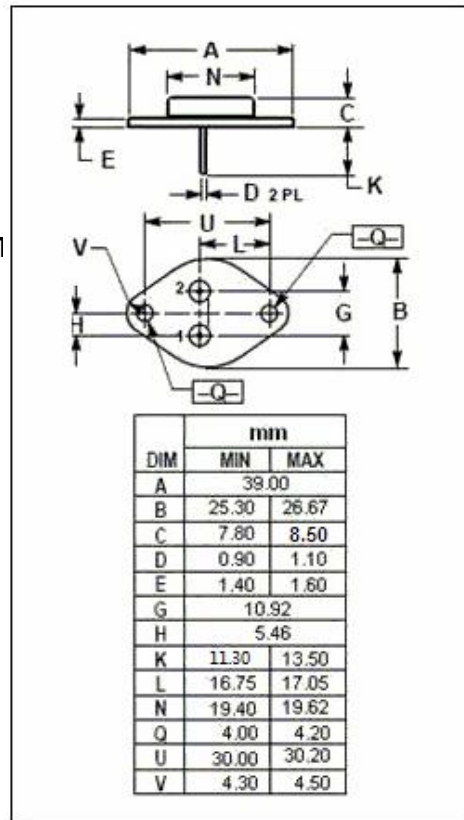
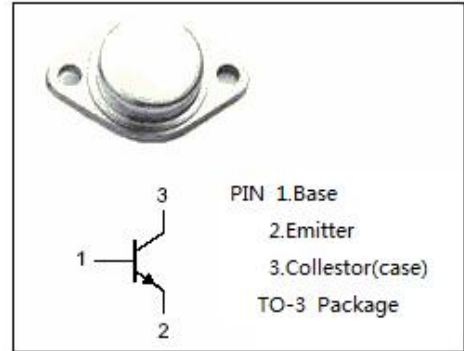
APPLICATIONS

- Designed for general-purpose switching and amplifier applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	400	V
V_{CEO}	Collector-Emitter Voltage	200	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	7	A
I_B	Base Current-Continuous	4	A
P_C	Collector Power Dissipation@ $T_c=25^\circ C$	60	W
T_J, T_{stg}	Operating and Storage Junction Temperature Range	-65~+150	$^\circ C$

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.08	$^\circ C/W$



isc Silicon NPN Power Transistor**BU118****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V_{CEO}	Collector-Emitter Sustaining Voltage	$I_C=30\text{mA}$; $I_B=0$	200		V
V_{CBO}	Collector-Base Sustaining Voltage	$I_C=1\text{mA}$; $I_B=0$	400		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 5\text{A}$; $I_B= 0.5\text{A}$		1.0	V
$V_{BE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 5\text{A}$; $I_B= 0.5\text{A}$		1.3	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C= 5\text{A}$; $V_{CE}= 4\text{V}$		1.5	V
I_{CEO}	Collector Cutoff Current	$V_{CE}= 200\text{V}$; $I_B=0$		1.0	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}= 6.0\text{V}$; $I_C=0$		0.1	mA
h_{FE}	DC Current Gain	$I_C= 2\text{A}$; $V_{CE}= 5\text{V}$	20	150	

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