

isc Silicon NPN Power Transistor

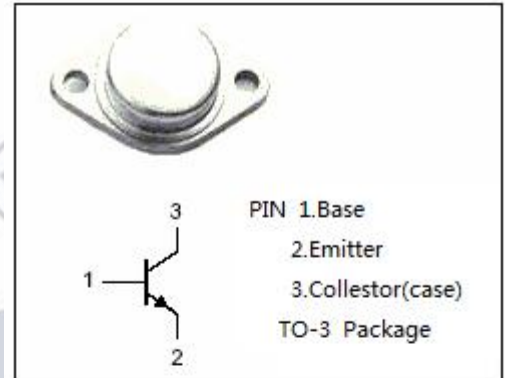
3DD102C

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 200V(\text{Min.})$
- DC Current Gain-
: $h_{FE} = 20(\text{Min.})@I_C = 2A$
- Collector-Emitter Saturation Voltage-
: $V_{CE(sat)} = 1.5V(\text{Max})@I_C = 2.5A$

APPLICATIONS

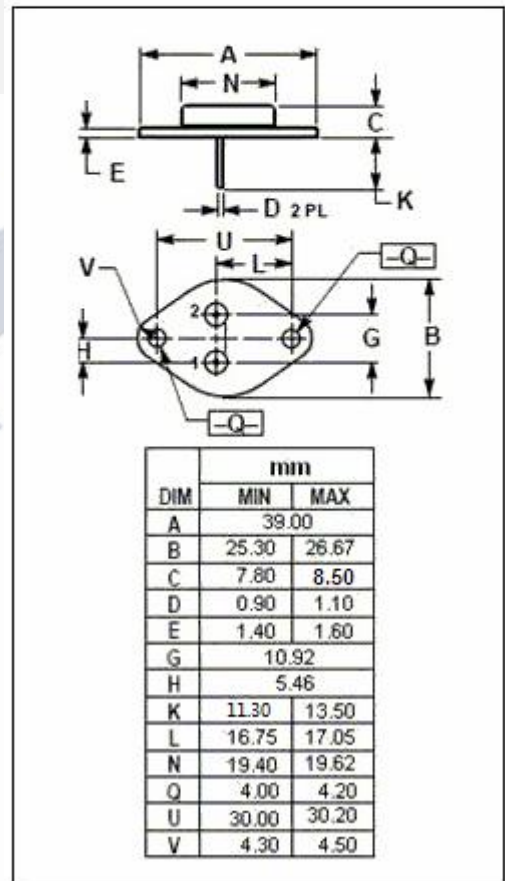
- Designed for power amplifier , DC Transform T-Shirt



SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	250	V
V_{CEO}	Collector-Emitter Voltage	200	V
V_{EBO}	Emitter-Base Voltage	4	V
I_C	Collector Current-Continuous	5	A
P_C	Collector Power Dissipation@ $T_C=75^\circ C$	50	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance,Junction to Case	2.0	$^\circ C/W$



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SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=5\text{mA}; I_B=0$	200		V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C=0.1\text{mA}; I_E=0$	250		V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=1\text{mA}; I_C=0$	5		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=2.5\text{A}; I_B=0.25\text{A}$		1.5	V
I_{CEO}	Collector Cutoff Current	$V_{CE}=50\text{V}; I_B=0$		2.0	mA
I_{CBO}	Collector Cutoff Current	$V_{CB}=50\text{V}; I_E=0$		1.0	mA
h_{FE}	DC Current Gain	$I_C=2\text{A}; V_{CE}=5\text{V}$	20		
f_T	Bandwidth Product	$I_C=0.5\text{A}; V_{CE}=10\text{V}$	1		MHz