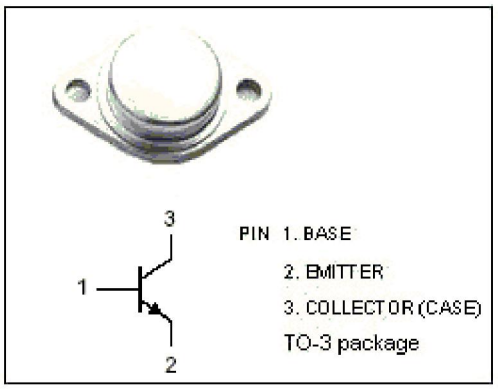
isc Silicon NPN Power Transistor 3DD7C

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 150V(Min)
- Collector-Emitter Saturation Voltage-
  : $V_{CE(sat)}$= 1.2V(Max) @I_C= 3.75A

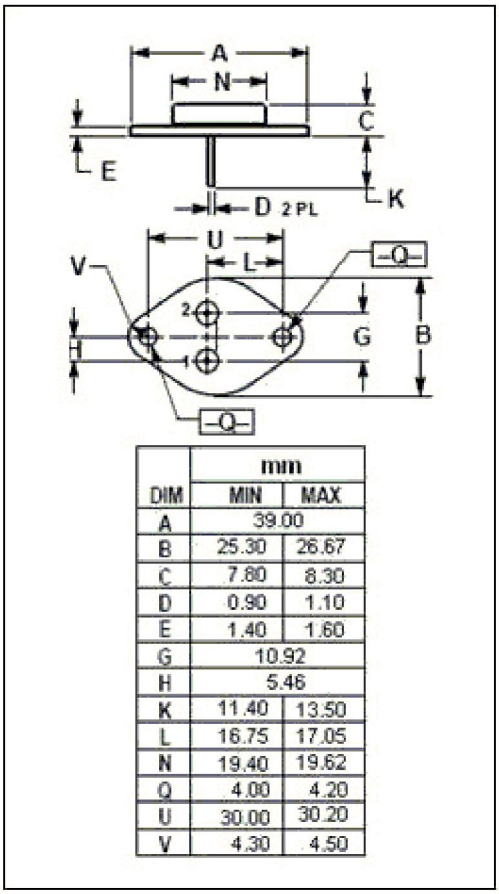


APPLICATIONS

- Designed for power amplifier, low speed switching and regulated power supply applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	200	V
V_{CEO}	Collector-Emitter Voltage	150	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	7.5	A
P_C	Collector Power Dissipation @ T_C=75℃	75	W
T_J	Junction Temperature	175	℃
T_{stg}	Storage Temperature Range	-55~175	℃



DIM	mm MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.30
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.40	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	1.33	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 3mA; I_B= 0	150			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 2mA; I_C= 0	5			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 3mA; I_E= 0	200			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 3.75A; I_B= 0.38A			1.2	V
I_{CEO}	Collector Cutoff Current	V_{CE}= 30V; I_B= 0			1.0	mA
h_{FE}	DC Current Gain	I_C= 3.75A; V_{CE}= 10V	15		180	