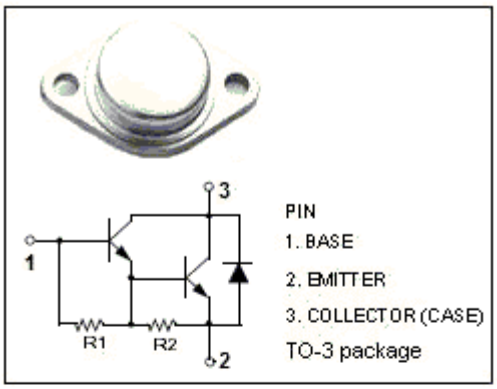
isc Silicon NPN Darlington Power Transistor 2SD628

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(sus)}$= 100V(Min.)
- High DC Current Gain-
  : h_{FE}= 1000(Min.)@I_C= 5A
- Low Collector Saturation Voltage-
  : $V_{CE\ (sat)}$= 2.0V(Max.)@ I_C= 5A
- Complement to Type 2SB638

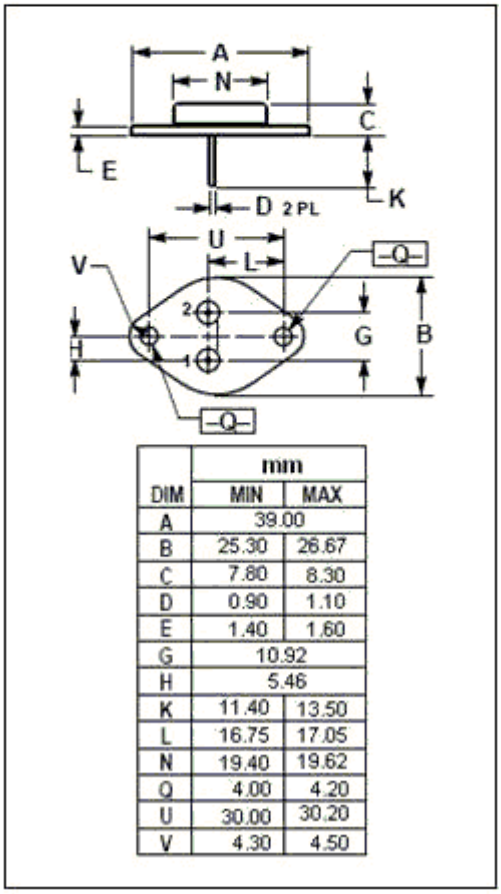


APPLICATIONS

- Designed for low frequency power amplifier and high current switching applications.

ABSOLUTE MAXIMUM RATINGS (T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continunous	10	A
I_{CM}	Collector Current-Peak	15	A
I_B	Base Current-Continunous	2	A
P_C	Collector Power Dissipation @T_C=25℃	80	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~+150	℃



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

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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= 200mA; R_{BE}= ∞	100			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 50mA; I_C= 0	7			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= 5A; I_B= 10mA			2.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= 10A; I_B= 100mA			3.0	V
$V_{BE(sat)-1}$	Base-Emitter Saturation Voltage	I_C= 5A; I_B= 10mA			2.0	V
$V_{BE(sat)-2}$	Base-Emitter Saturation Voltage	I_C= 10A; I_B= 100mA			3.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 100V; I_E= 0			0.1	mA
I_{CEO}	Collector Cutoff Current	V_{CE}= 80V; R_{BE}= ∞			1.0	μA
h_{FE}	DC Current Gain	I_C= 5A, V_{CE}= 3V	1000		20000	
Switching Times						
t_{on}	Turn-on Time	I_C= 5A, I_{B1}= -I_{B2}= 10mA		2		μs
t_{off}	Fall Time			8		μs