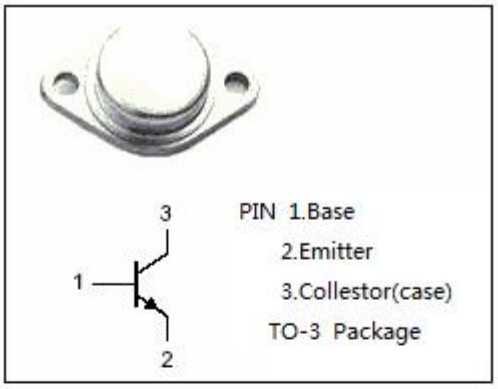
isc Silicon NPN Power Transistors 2SD180

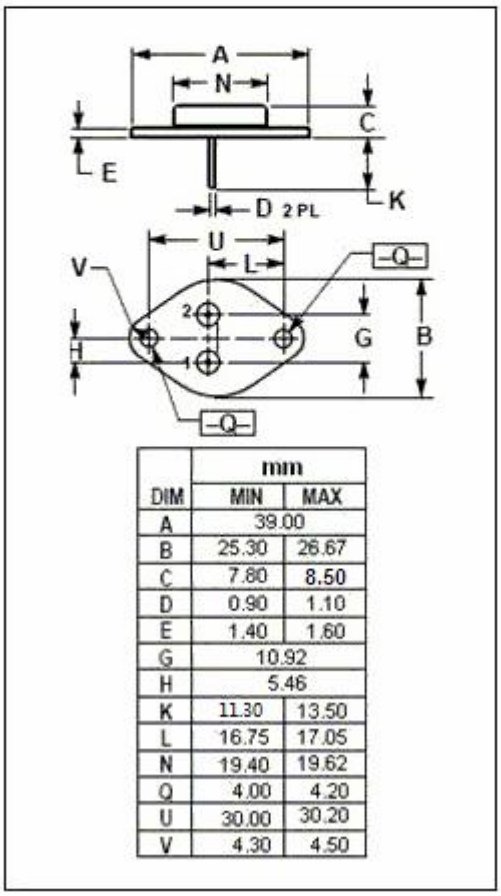
DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 70V(Min.)
- Low Collector Saturation Voltage-
  : $V_{CE(sat)}$= 1.5V(Max.)@ I_C= 5A
- Good Linearity of h_{FE}



APPLICATIONS

- Audio frequency power amplifier and low speed switching
- Suitable for output stages of 30 ~35 watts audio amplifier and DC-DC converter.



DIM	mm MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.50
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.30	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

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	70	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	6	A
I_{CM}	Collector Current-Peak	10	A
P_C	Collector Power Dissipation @T_C=25℃	60	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-65~＋150	℃

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ELECTRICAL CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 5A; I_B= 0.5A			1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 5A; I_B= 0.5A			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 70V; I_E= 0			0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0			0.5	mA
h_{FE}	DC Current Gain	I_C= 3A; V_{CE}=2V	30		180	
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= 10V; f= 1MHz		150		pF
f_T	Current-Gain—Bandwidth Product	I_C= 0.2A; V_{CE}= 10V		10		MHz