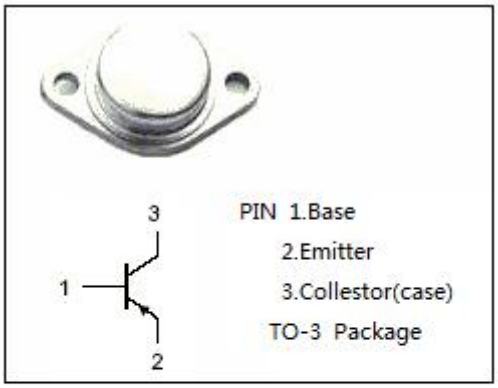
isc Silicon PNP Power Transistor — 2SB923

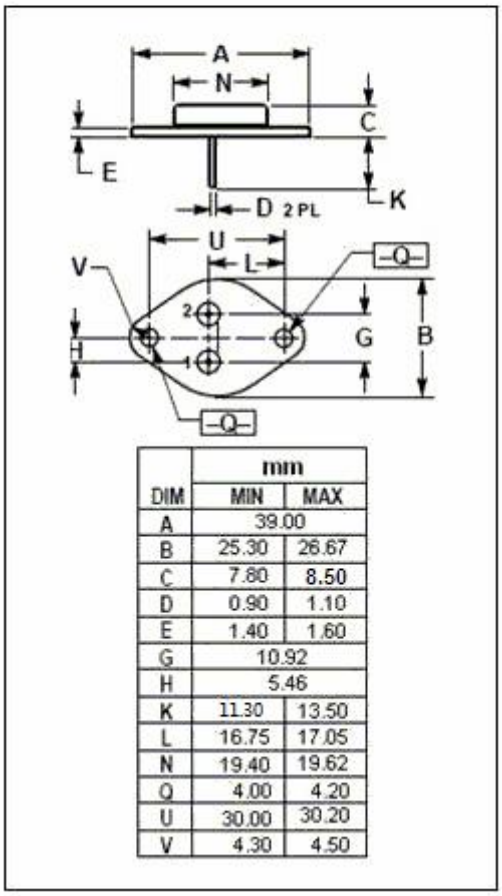
DESCRIPTION

- High Collector Current:: I_C= -20A
- Low Collector Saturation Voltage
  : $V_{CE(sat)}$= -0.5V(Max)@I_C= -10A
- Complement to Type 2SD1239
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- Designed for large current switching of relay drivers, high-speed inverters, converters applications.



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	-120	V
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-20	A
P_C	Total Power Dissipation @ T_C=25℃	100	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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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= -1mA; R_{BE}= ∞	-80			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= -1mA; I_E= 0	-120			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= -1mA; I_C= 0	-6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -10A; I_B= -1A			-0.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -80V; I_E= 0			-0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -4V; I_C= 0			-0.1	mA
h_{FE-1}	DC Current Gain	I_C= -1A; V_{CE}= -2V	70		280	
h_{FE-2}	DC Current Gain	I_C= -10A; V_{CE}= -2V	30			
f_T	Current-Gain—Bandwidth Product	I_C= -1A; V_{CE}= -2V		20		MHz

◆ **h_{FE-1} Classifications**

Q	R	S
70-140	100-200	140-280