

isc Silicon PNP Darlington Power Transistor

2SB883

DESCRIPTION

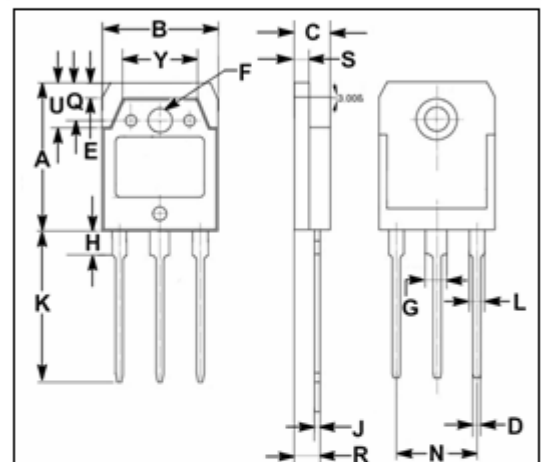
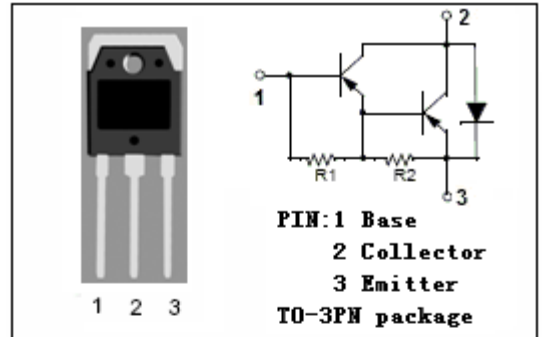
- High DC Current Gain-  
:  $h_{FE} = 2000(\text{Min}) @ I_C = -7\text{A}$
- Wide Area of Safe Operation
- Low Collector-Emitter Saturation Voltage-  
:  $V_{CE(\text{sat})} = -1.5\text{V}(\text{Max}) @ I_C = -7\text{A}$
- Complement to Type 2SD1193

APPLICATIONS

- Designed for motor drivers, printer hammer drivers, relay drivers, voltage regulator control applications.

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-70	V
$V_{CEO}$	Collector-Emitter Voltage	-60	V
$V_{EBO}$	Emitter-Base Voltage	-6	V
$I_C$	Collector Current-Continuous	-15	A
$I_{CM}$	Collector Current-Peak	-20	A
$P_C$	Collector Power Dissipation $T_C = 25^\circ\text{C}$	70	W
$T_j$	Junction Temperature	150	°C
$T_{\text{stg}}$	Storage Temperature Range	-55~150	°C



DIM	mm	
	MIN	MAX
A	19.60	20.10
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.20
H	3.20	3.40
J	0.595	0.605
K	20.00	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.10
Y	9.90	10.10

**isc Silicon PNP Darlington Power Transistor****2SB883****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -50\text{mA}$ , $R_{BE} = \infty$	-60			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C = -5\text{mA}$ , $I_E = 0$	-70			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -7\text{A}$ , $I_B = -14\text{mA}$			-1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -7\text{A}$ , $I_B = -14\text{mA}$			-2.0	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -40\text{V}$ , $I_E = 0$			-100	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -5\text{V}$ ; $I_C = 0$			-3	mA
$h_{FE}$	DC Current Gain	$I_C = -7\text{A}$ ; $V_{CE} = -2\text{V}$	2000			
$f_T$	Current-Gain—Bandwidth Product	$I_C = -7\text{A}$ ; $V_{CE} = -5\text{V}$		20		MHz