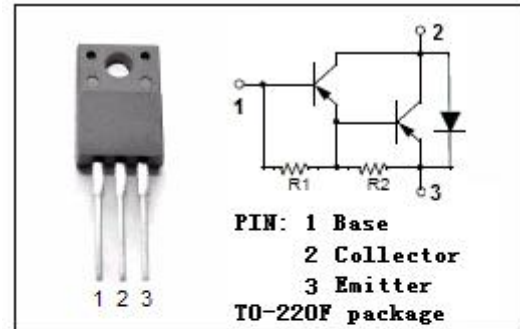


**isc Silicon PNP Darlington Power Transistor**
**2SB1228**
**DESCRIPTION**

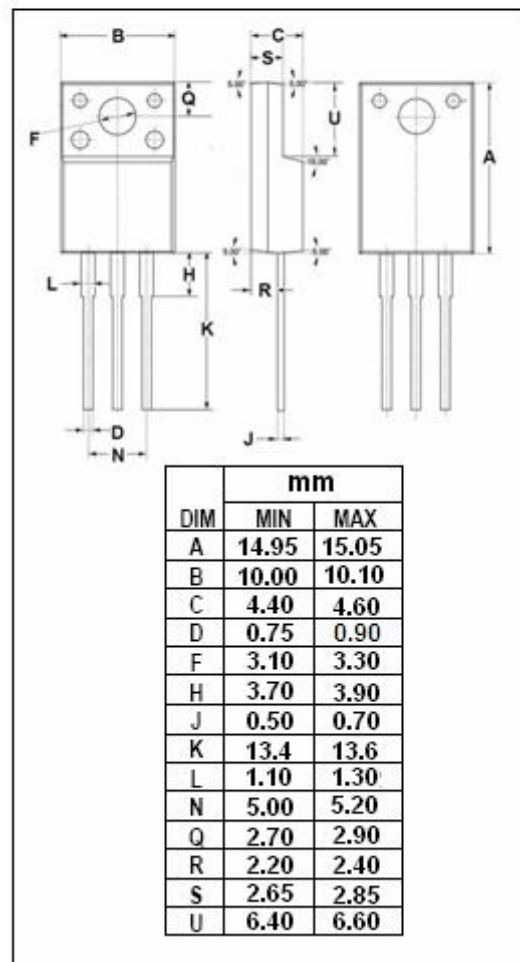
- High DC Current Gain-  
:  $h_{FE} = 1500(\text{Min})@ (V_{CE} = -3V, I_C = -4A)$
- Large Current Capability and Wide ASO.
- Complement to Type 2SD1830
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for use in control of motor drivers, printer hammer drivers, and constant-voltage regulators.


**ABSOLUTE MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ )**

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-110	V
$V_{CEO}$	Collector-Emitter Voltage	-100	V
$V_{EBO}$	Emitter-Base Voltage	-6	V
$I_C$	Collector Current-Continuous	-8	A
$I_{CM}$	Collector Current-Peak	-12	A
$P_C$	Collector Power Dissipation @ $T_a = 25^\circ\text{C}$	2	W
	Collector Power Dissipation @ $T_c = 25^\circ\text{C}$	30	
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55~150	$^\circ\text{C}$



**isc Silicon PNP Darlington Power Transistor****2SB1228****ELECTRICAL CHARACTERISTICS**T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -50mA; R <sub>BE</sub> = ∞	-100			V
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = -5mA; I <sub>E</sub> = 0	-110			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -4A; I <sub>B</sub> = -8mA			-1.5	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = -4A; I <sub>B</sub> = -8mA			-2.0	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -80V; I <sub>E</sub> = 0			-100	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -5V; I <sub>C</sub> = 0			-3.0	mA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -4A; V <sub>CE</sub> = -3V	1500			
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = -4A; V <sub>CE</sub> = -5V		20		MHz

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