

# isc Silicon PNP Power Transistor

## 2SB829

### DESCRIPTION

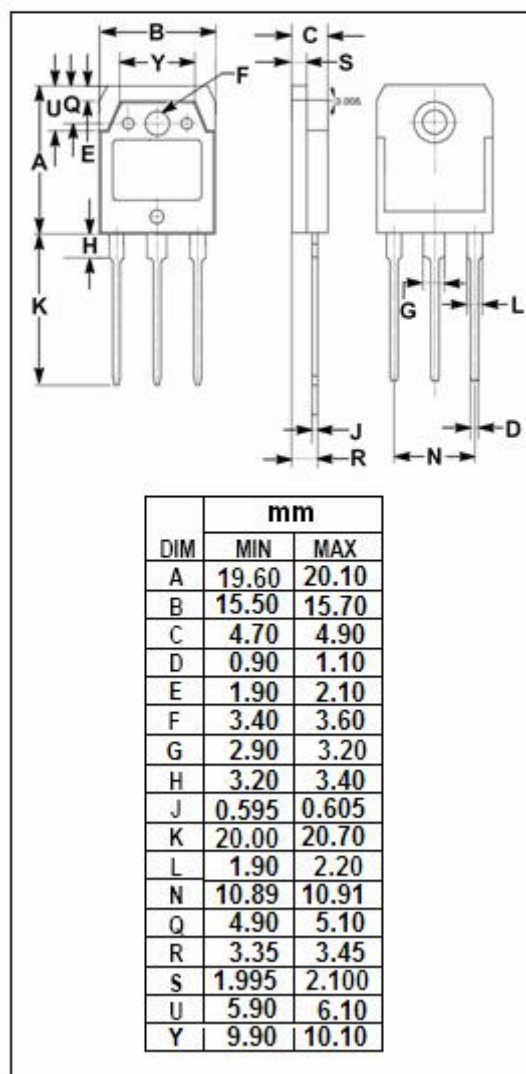
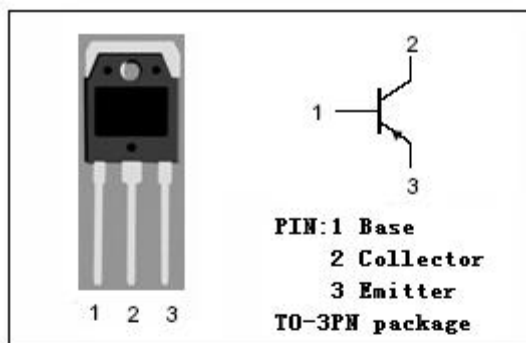
- High Collector Current:  $I_C = -15A$
- Low Collector Saturation Voltage  
:  $V_{CE(sat)} = -0.5V(Max) @ I_C = -8A$
- Wide Area of Safe Operation
- Complement to Type 2SD1065
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

- Designed for relay drivers, high-speed inverters, converters, and other general high-current switching applications.

### ABSOLUTE MAXIMUM RATINGS( $T_a = 25^\circ C$ )

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-60	V
$V_{CEO}$	Collector-Emitter Voltage	-50	V
$V_{EBO}$	Emitter-Base Voltage	-6	V
$I_C$	Collector Current-Continuous	-15	A
$I_{CM}$	Collector Current-Peak	-20	A
$P_C$	Total Power Dissipation @ $T_C = 25^\circ C$	90	W
$T_J$	Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ C$



**isc Silicon PNP Power Transistor****2SB829****ELECTRICAL CHARACTERISTICS****T<sub>C</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> = -1mA; R <sub>BE</sub> = ∞	-50			V
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = -1mA; I <sub>E</sub> = 0	-60			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = -1mA; I <sub>C</sub> = 0	-6			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -8A; I <sub>B</sub> = -0.4A			-0.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -40V; I <sub>E</sub> = 0			-0.1	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -4V; I <sub>C</sub> = 0			-0.1	mA
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = -1A; V <sub>CE</sub> = -2V	70		280	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -8A; V <sub>CE</sub> = -2V	30			

**◆ h<sub>FE-1</sub> Classifications**

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

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