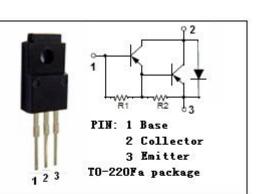


## *isc* Silicon PNP Darlington Power Transistor

## 2SB1402

### DESCRIPTION

- Collector-Emitter Breakdown Voltage-
- : V<sub>(BR)CEO</sub>= -120V(Min)
- High DC Current Gain-
- : h<sub>FE</sub>= 1000(Min)@ (V<sub>CE</sub>= -3V, I<sub>C</sub>= -1.5A)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

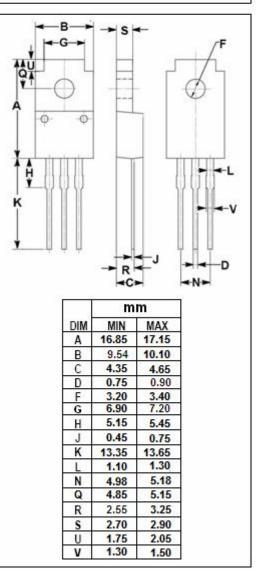


### **APPLICATIONS**

• Designed for low frequency power amplifier applications.



PARAMETER	VALUE	UNIT						
Collector-Base Voltage	-120	V						
Collector-Emitter Voltage	-120	V						
Emitter-Base Voltage	-7	V						
Collector Current-Continuous	-3	А						
Collector Current-Peak	-6	А						
Collector Power Dissipation @Ta=25℃	2	w						
Collector Power Dissipation @Tc=25°C	25							
Junction Temperature	150	°C						
Storage Temperature	-55~150	°C						
	Collector-Base Voltage   Collector-Emitter Voltage   Emitter-Base Voltage   Collector Current-Continuous   Collector Current-Peak   Collector Power Dissipation @Ta=25°C   Collector Power Dissipation @Tc=25°C   Junction Temperature	Collector-Base Voltage-120Collector-Emitter Voltage-120Emitter-Base Voltage-7Collector Current-Continuous-3Collector Current-Peak-6Collector Power Dissipation @Ta=25°C2Collector Power Dissipation @Tc=25°C25Junction Temperature150						



1



### *isc* Silicon PNP Darlington Power Transistor

# 2SB1402

#### **ELECTRICAL CHARACTERISTICS**

#### Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -25mA; R <sub>BE</sub> = ∞	-120			V
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = -0.1mA; I <sub>E</sub> = 0	-120			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = -5mA; I <sub>C</sub> = 0	-7			V
V <sub>CE(sat)</sub> -1	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -1.5A; I <sub>B</sub> = -3mA			-1.5	V
V <sub>CE(sat)</sub> -2	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -3A; I <sub>B</sub> = -30mA			-3.0	V
V <sub>BE(sat)</sub> -1	Base-Emitter Saturation Voltage	I <sub>C</sub> = -1.5A; I <sub>B</sub> = -3mA			-2.0	V
V <sub>BE(sat)-2</sub>	Base-Emitter Saturation Voltage	Ic= -3A; I <sub>B</sub> = -30mA			-3.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -100V; I <sub>E</sub> = 0			-10	μA
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> = -100V; R <sub>BE</sub> = ∞			-10	μA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -1.5A; V <sub>CE</sub> = -3V	1000		20000	

Notice:

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.

2