

# isc Silicon PNP Darlington Power Transistor

# 2SB1343

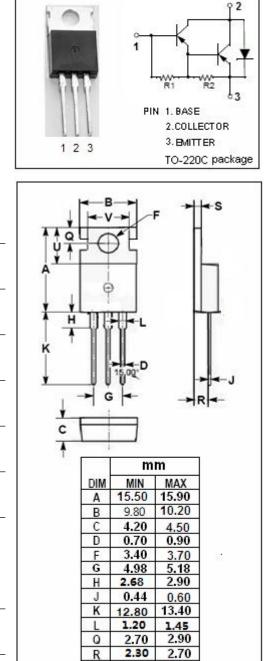
#### DESCRIPTION

- Collector-Emitter Breakdown Voltage-
- : V<sub>(BR)CEO</sub>= -100V(Min)
- High DC Current Gain-
- :  $h_{FE}$ = 1000(Min)@ (V<sub>CE</sub>= -3V, I<sub>C</sub>= -2A)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

#### **APPLICATIONS**

Designed for power amplifier applications.

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)



# SYMBOL PARAMETER

isc website: www.iscsemi.com

OTMEOL	I ANAME I EN	TALUE	onn
Vсво	Collector-Base Voltage	-100	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-100	V
VEBO	Emitter-Base Voltage	-7	V
lc	Collector Current-Continuous	-8	А
Ісм	Collector Current-Peak	-10	А
Pc	Collector Power Dissipation @Ta=25℃	2	W
	Collector Power Dissipation @Tc=25°C	40	vv
TJ	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55~150	°C

VALUE UNIT

1

isc & iscsemi is registered trademark

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1.29

6.45

8.66

1.35

6.65

8.86



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### 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> = -10mA; I <sub>B</sub> = 0	-100			V
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = -50 μ A; I <sub>E</sub> = 0	-100			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -3A; I <sub>B</sub> = -6mA			-1.5	V
Ісво	Collector Cutoff Current	V <sub>CB</sub> = -100V ; I <sub>E</sub> = 0			-10	μA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -5V; I <sub>C</sub> = 0			-3	mA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -2A ; V <sub>CE</sub> = -3V	1000		20000	
Сов	Output Capacitance	I <sub>E</sub> = 0; V <sub>CB</sub> = -10V; f <sub>test</sub> = 1MHz		90		pF
f⊤	Current-Gain—Bandwidth Product	I <sub>E</sub> = 0.5A; V <sub>CE</sub> = -5V; f <sub>test</sub> = 10MHz		12		MHz

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