

# isc Silicon PNP Power Transistor

#### **DESCRIPTION**

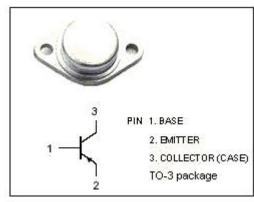
- High Collector-Emitter Breakdown Voltage-V<sub>(BR)CEO</sub>= -120V(Min)
- · Fast Switching Speed
- · Wide Area of Safe Operation
- Complement to Type 2SC2522
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

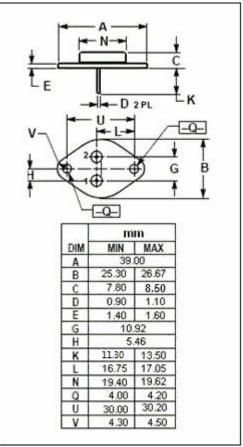
## **APPLICATIONS**

- · High frequency power amplifier
- · Audio power amplifiers
- Switching regulators
- DC-DC converters

# ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-120	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-120	V
V <sub>EBO</sub>	Emitter-Base Voltage	-7	V
lc	Collector Current-Continuous	-12	А
Pc	Collector Power Dissipation @ T <sub>C</sub> =25°C	120	W
TJ	Junction Temperature	150	$^{\circ}$
T <sub>stg</sub>	Storage Temperature Range	-65~150	$^{\circ}$







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2SA1072

#### **ELECTRICAL CHARACTERISTICS**

T<sub>C</sub>=25℃ 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> = ∞	-120			V
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = -50 μ A; I <sub>E</sub> = 0	-120			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = -50 μ A ; I <sub>C</sub> = 0	-7			V
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -5A; I <sub>B</sub> = -0.5A			-1.8	V
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = -5A; V <sub>CE</sub> = -5V			-1.7	V
Ісво	Collector Cutoff Current	V <sub>CB</sub> = -120V ; I <sub>E</sub> = 0			-50	μА
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> = -120V ;R <sub>BE</sub> = ∞			-1	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -7V; I <sub>C</sub> = 0			-50	μА
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = -1A; V <sub>CE</sub> = -5V	60		200	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -7A; V <sub>CE</sub> = -5V	40			

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