

# isc Silicon PNP Power Transistor

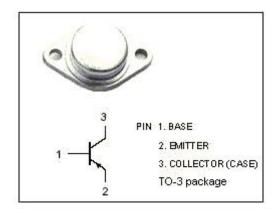
2SA1116

### **DESCRIPTION**

- · Collector-Emitter Breakdown Voltage-
  - : V<sub>(BR)CEO</sub>= -200V(Min.)
- High Power Dissipation
- Complement to Type 2SC2607
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

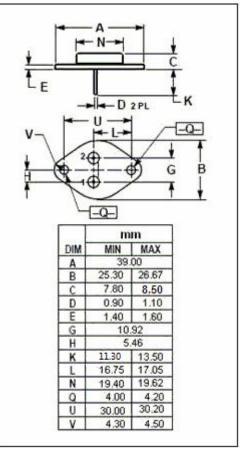


· Designed for general purpose applications.



## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>СВО</sub>	Collector-Base Voltage	-200	V	
V <sub>CEO</sub>	Collector-Emitter Voltage	-200	V	
V <sub>EBO</sub>	Emitter-Base Voltage	-6	V	
lc	Collector Current-Continuous	-15	А	
I <sub>B</sub>	Base Current-Continuous	-5	А	
Pc	Collector Power Dissipation @T <sub>C</sub> =25°C	150	W	
T <sub>j</sub>	Junction Temperature	150	$^{\circ}$ C	
T <sub>stg</sub>	Storage Temperature	-65~150	$^{\circ}$ C	





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### **ELECTRICAL CHARACTERISTICS**

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -50mA; I <sub>B</sub> = 0	-200			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -10A; I <sub>B</sub> = -1A			-3.0	٧
Ісво	Collector Cutoff Current	V <sub>CB</sub> = -200V; I <sub>E</sub> = 0			-100	μА
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -6V; I <sub>C</sub> = 0			-100	μА
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -5A ; V <sub>CE</sub> = -4V	30			
f⊤	Current-Gain—Bandwidth Product	I <sub>E</sub> = 0.5A; V <sub>CE</sub> = -12V		20		MHz

## **Switching Times**

t <sub>r</sub>	Rise Time		0.3	μ \$
<b>t</b> stg	Storage Time	I <sub>C</sub> = -5A, R <sub>L</sub> = 12 Ω, I <sub>B1</sub> = -I <sub>B2</sub> = -0.5A, V <sub>CC</sub> = -60V	0.9	μ \$
t <sub>f</sub>	Fall Time		0.2	μ \$

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