



# **isc Silicon NPN Power Transistor**

### **DESCRIPTION**

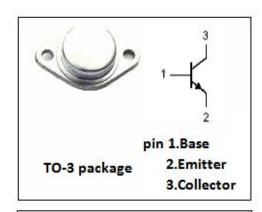
- · Collector-Emitter Breakdown Voltage-
- : V<sub>CEO</sub>=140V(Min)
- Minimum Lot-to-Lot variations for robust device Performance and reliable operation

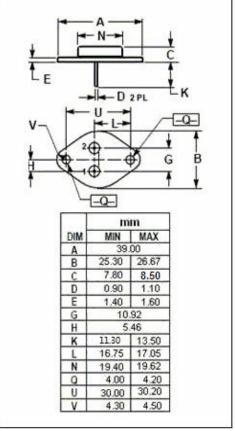
### **APPLICATIONS**

· Power amplifier and switching applications

## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNI T
V <sub>CBO</sub>	Collector-Base Voltage	160	V
Vceo	Collector-Emitter Voltage	140	V
V <sub>EBO</sub>	Emitter-Base Voltage	6	V
lc	Collector Current-Continuous	50	Α
P <sub>D</sub>	Collector Power Dissipation @ T <sub>C</sub> =25 ℃	250	W
TJ	Junction Temperature	-65~200	$^{\circ}$
T <sub>stg</sub>	Storage Temperature Range	-65~200	$^{\circ}$







# **isc Silicon NPN Power Transistor**

2N6280

#### **ELECTRICAL CHARACTERISTICS**

Tc=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V(BR)CEO	Collector-Emitter Breakdown Voltage	Ic=50mA	140			V
I <sub>EBO</sub>	Emitter-Base Cutoff Current	V <sub>BE</sub> =6V			100	uA
I <sub>CEO</sub>	Collector-Emitter Cutoff Current	V <sub>CE</sub> = 70V			50	uA
V <sub>CE</sub> (sat)-1	Collector-Emitter Saturation Voltage	Ic=20A; I <sub>B</sub> = 2A			1.2	V
V <sub>CE(sat)-2</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 50A; I <sub>B</sub> = 10A			3	V
V <sub>BE</sub> (sat)-1	Base-Emitter Saturation Voltage	I <sub>C</sub> = 20A; I <sub>B</sub> = 2A			1.8	V
V <sub>BE(sat)-2</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> =50A; I <sub>B</sub> = 10A			3.5	V
h <sub>FE-1</sub>	DC Current Gain	Ic=1A; VcE= 4V	50			
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> =20A; V <sub>CE</sub> =4V	30		120	
h <sub>FE-3</sub>	DC Current Gain	Ic=50A; V <sub>CE</sub> = 4V	10			

### 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