

### **isc Silicon PNP Power Transistor**

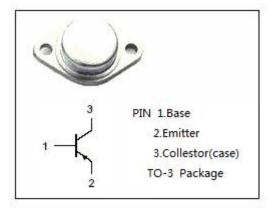
## 3CF20D

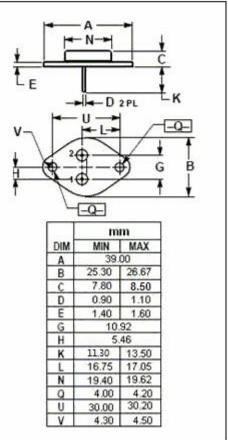
### DESCRIPTION

- Large collector current
- · Low collector saturation voltage
- High power dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

#### APPLICATIONS

- Designed for use in DC-DC converter
- Driver of solenoid or motor





### ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	-300	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-250	V
$V_{\text{EBO}}$	Emitter-Base Voltage	-6	V
lc	Collector Current-Continuous	-20	Α
Pc	Collector Power Dissipation @Tc=75℃	200	W
TJ	Junction Temperature	175	°C
T <sub>stg</sub>	Storage Temperature	-55~175	°C

### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	0.75	°C/W



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# 3CF20D

### **ELECTRICAL CHARACTERISTICS**

#### $T_c=25^{\circ}C$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	МАХ	UNIT
BV <sub>CEO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> =-5mA ; I <sub>B</sub> =0	-250		V
V <sub>CE(sat)-1</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -10A; I <sub>B</sub> = -1A		-1.8	V
ICEO	Collector Cutoff Current	V <sub>CE</sub> = -250V; I <sub>B</sub> =0		-500	μA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -6V; I <sub>C</sub> =0		-500	μA
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> =-10A ; V <sub>CE</sub> = -10V	15		

### **NOTICE:**

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