

**DESCRIPTION**

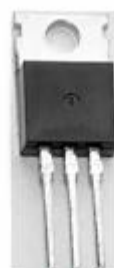
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = 300(V)(Min.)$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

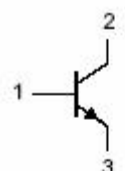
- Series regulator, switch and general purpose applications

**ABSOLUTE MAXIMUM RATINGS( $T_a=25^{\circ}C$ )**

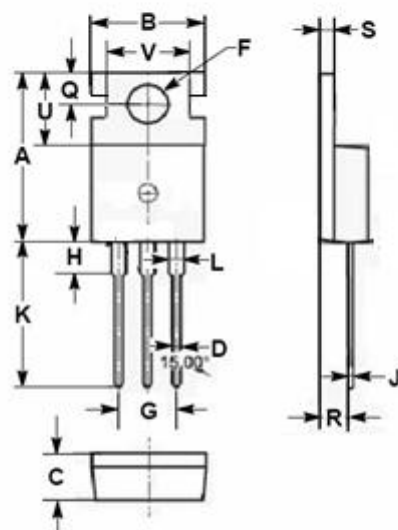
SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	300	V
$V_{CEO}$	Collector-Emitter Voltage	300	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current-Continuous	1	A
$P_C$	Total Power Dissipation @ $T_C=25^{\circ}C$	30	W
$T_J$	Junction Temperature	150	$^{\circ}C$
$T_{stg}$	Storage Temperature Range	-55~150	$^{\circ}C$



1 2 3



PIN 1. BASE  
2. COLLECTOR  
3. EMITTER  
TO-220C package



DIM	mm	
	MIN	MAX
A	15.50	15.90
B	9.80	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	12.80	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

## isc Silicon NPN Power Transistor

2SC2022

## ELECTRICAL CHARACTERISTICS

 $T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=25\text{mA}; I_B=0$	300			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=0.5\text{A}; I_B=100\text{mA}$			1.0	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=300\text{V}; I_E=0$			1	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=6\text{V}; I_C=0$			1	mA
$h_{FE}$	DC Current Gain	$I_C=0.2\text{A}; V_{CE}=4\text{V}$	30			
$f_T$	Current-Gain—Bandwidth Product	$I_E=100\text{mA}; V_{CE}=12\text{V}$		10		MHz

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