

**isc Silicon PNP Power Transistor**
**2N6211**
**DESCRIPTION**

- High Collector-Emitter Sustaining Voltage-  
:  $V_{CEO(SUS)} = -225V(\text{Min})$
- Good Linearity of  $h_{FE}$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

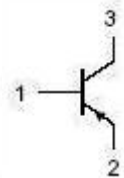
- Designed for high-speed switching and linear amplifier application for high-voltage operational amplifier, switching regulators, converters, inverters, deflection stages and high fidelity amplifiers.

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

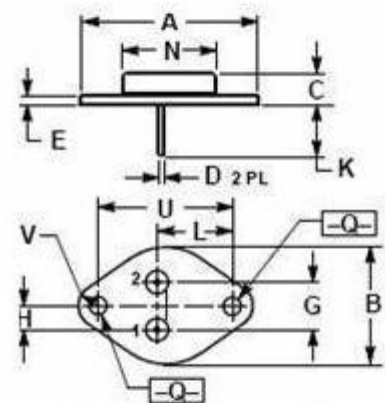
SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-275	V
$V_{CEO}$	Collector-Emitter Voltage	-225	V
$V_{EBO}$	Emitter-Base Voltage	-6	V
$I_C$	Collector Current-Continuous	-2	A
$I_{CM}$	Collector Current-Peak	-5	A
$I_B$	Collector Current-Continuous	-1	A
$P_C$	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	35	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-65~150	$^\circ\text{C}$

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	5.0	$^\circ\text{C/W}$



PIN 1. BASE  
2. EMITTER  
3. COLLECTOR (CASE)  
TO-66 package



DIM	mm	
	MIN	MAX
A	31.40	31.80
B	17.30	17.90
C	6.70	7.10
D	0.70	0.90
E	1.40	1.80
G	5.08	
H	2.54	
K	9.80	10.50
L	14.70	14.90
N	12.40	12.70
Q	3.60	3.80
U	24.30	24.50
V	3.50	3.70

## isc Silicon PNP Power Transistor

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## 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	$I_C = -50\text{mA}$ ; $I_B = 0$	-225			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -1\text{mA}$ ; $I_C = 0$	-6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -1\text{A}$ ; $I_B = -125\text{mA}$			-1.4	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -1\text{A}$ ; $I_B = -125\text{mA}$			-1.4	V
$I_{CEV}$	Collector Cutoff Current	$V_{CE} = -250\text{V}$ ; $V_{BE(off)} = -1.5\text{V}$			-0.5	mA
$I_{CEO}$	Collector Cutoff Current	$V_{CE} = -150\text{V}$ ; $I_B = 0$			-5.0	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -6\text{V}$ ; $I_C = 0$			-1	mA
$h_{FE}$	DC Current Gain	$I_C = -1\text{A}$ ; $V_{CE} = -2.8\text{V}$	10		100	
$f_T$	Current-Gain—Bandwidth Product	$I_C = -0.2\text{A}$ ; $V_{CE} = -10\text{V}$ ; $f_{test} = 5\text{MHz}$	10			MHz
$C_{OB}$	Output Capacitance	$I_E = 0$ ; $V_{CB} = -10\text{V}$ ; $f_{test} = 1\text{MHz}$			220	pF

## Switching times

$t_r$	Rise Time	$I_C = -1\text{A}$ , $V_{CC} = -200\text{V}$ ; $I_{B1} = -I_{B2} = -125\text{mA}$			0.6	$\mu\text{s}$
$t_s$	Storage Time				2.5	$\mu\text{s}$
$t_f$	Fall Time				0.6	$\mu\text{s}$

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