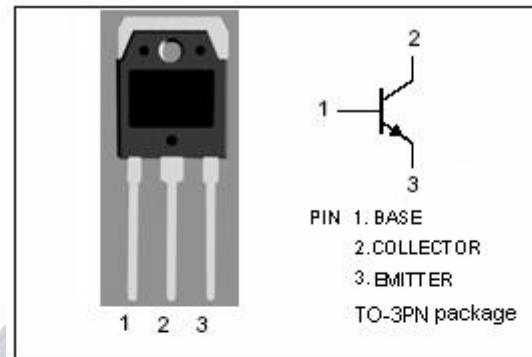




INCHANGE Semiconductor

isc Silicon NPN Power Transistor**2SC6011/A****DESCRIPTION**

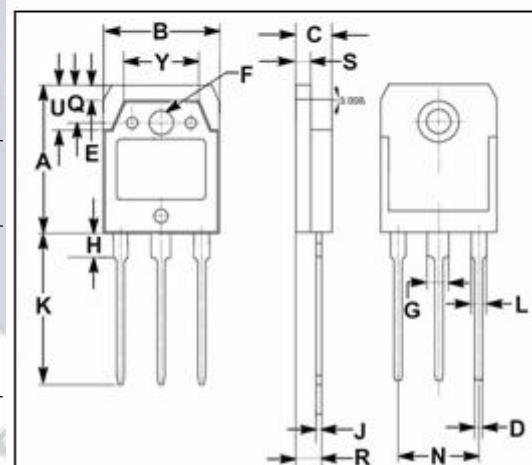
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 200V$ (Min)-2SC6011
= $200V$ (Min)-2SC6011A
- Good Linearity of h_{FE}
- Complement to Type 2SA2151/A
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for audio and general purpose applications

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	200	V
		230	
V_{CEO}	Collector-Emitter Voltage	200	V
		230	
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	15	A
I_B	Base Current-Continuous	4	A
P_C	Collector Power Dissipation @ $T_c=25^\circ C$	160	W
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature Range	-55~150	°C



DIM	mm	
	MIN	MAX
A	19.60	20.10
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.20
H	3.20	3.40
J	0.595	0.605
K	20.00	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.10
Y	9.90	10.10

INCHANGE Semiconductor

isc Silicon NPN Power Transistor**2SC6011/A****ELECTRICAL CHARACTERISTICS** $T_c=25^\circ C$ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	2SC6011	$I_c = 50\text{mA} ; I_B = 0$	200			V
		2SC6011A		230			
$V_{CE(\text{sat})}$	Collector-Emitter Saturation Voltage		$I_c = 5\text{A} ; I_B = 0.5\text{A}$			0.5	V
I_{CBO}	Collector Cutoff Current	2SC6011	$V_{CB} = 200\text{V} ; I_E = 0$			10	μA
		2SC6011A	$V_{CB} = 230\text{V} ; I_E = 0$				
I_{EBO}	Emitter Cutoff Current		$V_{EB} = 6\text{V} ; I_c = 0$			10	μA
h_{FE}	DC Current Gain		$I_c = 3\text{A} ; V_{CE} = 4\text{V}$	50		180	
C_{OB}	Output Capacitance		$I_E = 0 ; V_{CB} = 10\text{V} ; f_{\text{test}} = 1.0\text{MHz}$		270		pF
f_T	Current-Gain—Bandwidth Product		$I_E = -0.5\text{A} ; V_{CE} = 12\text{V}$		20		MHz

◆ h_{FE} Classifications

O	P	Y
50-100	70-140	90-180