

**isc Silicon PNP Power Transistor**

**2N6107**

**DESCRIPTION**

- DC Current Gain-  
:  $h_{FE} = 30-150 @ I_C = -2A$
- Collector-Emitter Sustaining Voltage-  
:  $V_{CEO(SUS)} = -70V(\text{Min})$
- Complement to Type 2N6292

**APPLICATIONS**

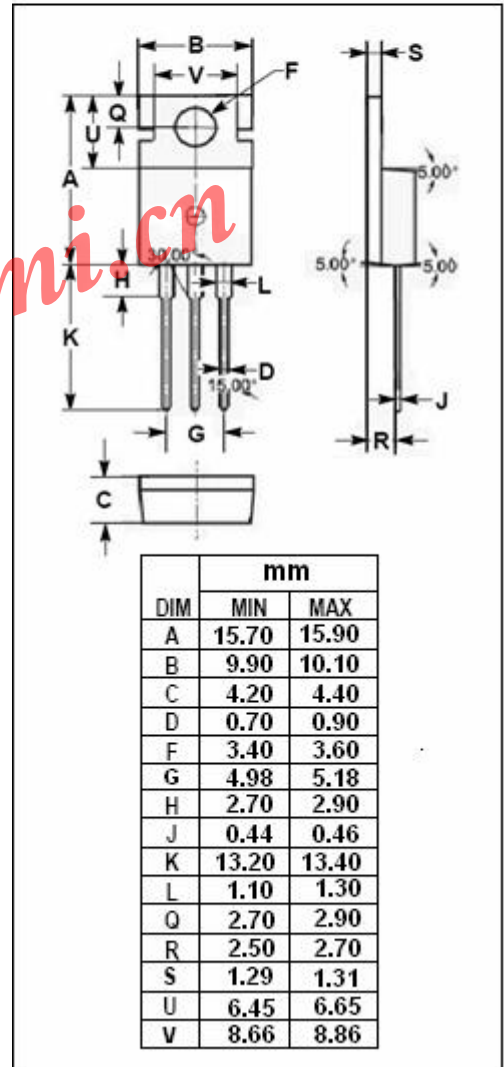
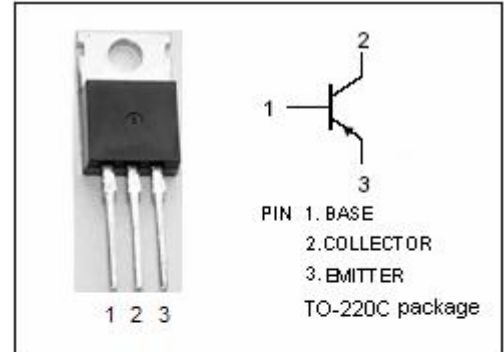
- Designed for use in general-purpose amplifier and switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-80	V
$V_{CEO}$	Collector-Emitter Voltage	-70	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-7	A
$I_{CM}$	Collector Current-Peak	-10	A
$I_B$	Base Current	-3	A
$P_C$	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	40	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	3.125	$^\circ\text{C/W}$



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## ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C = -100\text{mA}; I_B = 0$	-70		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -7\text{A}; I_B = -3\text{A}$		-3.5	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -7\text{A}; V_{CE} = -4\text{V}$		-3.0	V
$I_{CEX}$	Collector Cutoff Current	$V_{CE} = -80\text{V}; V_{BE(off)} = -1.5\text{V}$ $V_{CE} = -70\text{V}; V_{BE(off)} = -1.5\text{V}; T_C = 150^\circ\text{C}$		-0.1 -2.0	mA
$I_{CEO}$	Collector Cutoff Current	$V_{CE} = -60\text{V}; I_B = 0$		-1.0	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -5\text{V}; I_C = 0$		-1.0	mA
$h_{FE-1}$	DC Current Gain	$I_C = -2\text{A}; V_{CE} = -4\text{V}$	30	150	
$h_{FE-2}$	DC Current Gain	$I_C = -7\text{A}; V_{CE} = -4\text{V}$	2.3		
$C_{OB}$	Output Capacitance	$I_E = 0; V_{CB} = -10\text{V}; f_{test} = 1\text{MHz}$		250	pF
$f_T$	Current-Gain Bandwidth Product	$I_C = -0.5\text{A}; V_{CE} = -4\text{V}; f_{test} = 1\text{MHz}$	10		MHz