

## isc Silicon PNP Power Transistor

2SA2050

### DESCRIPTION

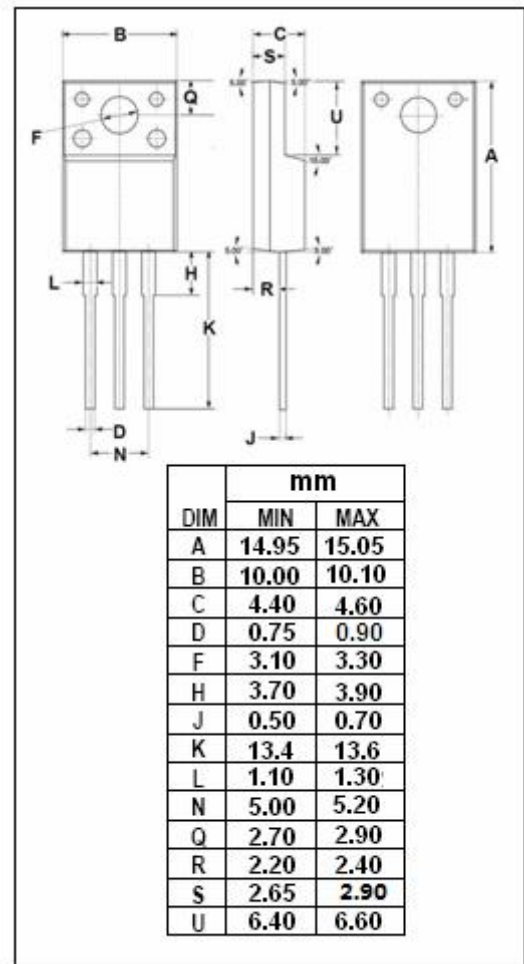
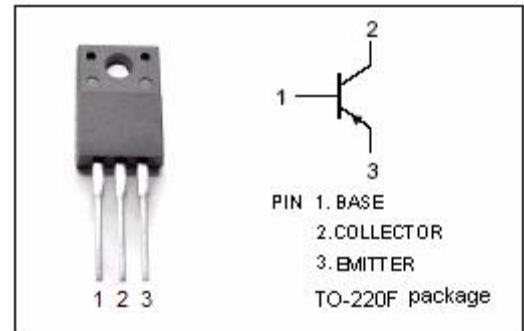
- High DC current amplifier rate  
 $h_{FE}: 60-240 @ V_{CE} = -5V, I_C = -0.2A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

- General Purpose Switching and Amplification

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-180	V
$V_{CEO}$	Collector-Emitter Voltage	-160	V
$V_{EBO}$	Emitter-Base Voltage	-6	V
$I_C$	Collector Current-Continuous	-1.5	A
$P_C$	Total Power Dissipation @ $T_a = 25^\circ\text{C}$	1.5	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



**isc Silicon PNP Power Transistor****2SA2050****ELECTRICAL CHARACTERISTICS** $T_c=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -500\text{mA}; I_B = -50\text{mA}$			-1.0	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -60\text{V}; I_E = 0$			-10	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -6\text{V}; I_C = 0$			-10	$\mu\text{A}$
$h_{FE1}$	DC Current Gain	$I_C = -0.2\text{A}; V_{CE} = -5\text{V}$	60		240	
$h_{FE2}$	DC Current Gain	$I_C = -1.5\text{A}; V_{CE} = -5\text{V}$	50			
$f_T$	Transition frequency	$V_{CE} = -10\text{V}, I_C = -0.05\text{A}$	50			MHz

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