

**isc Silicon NPN Power Transistor**

**2SC3854**

**DESCRIPTION**

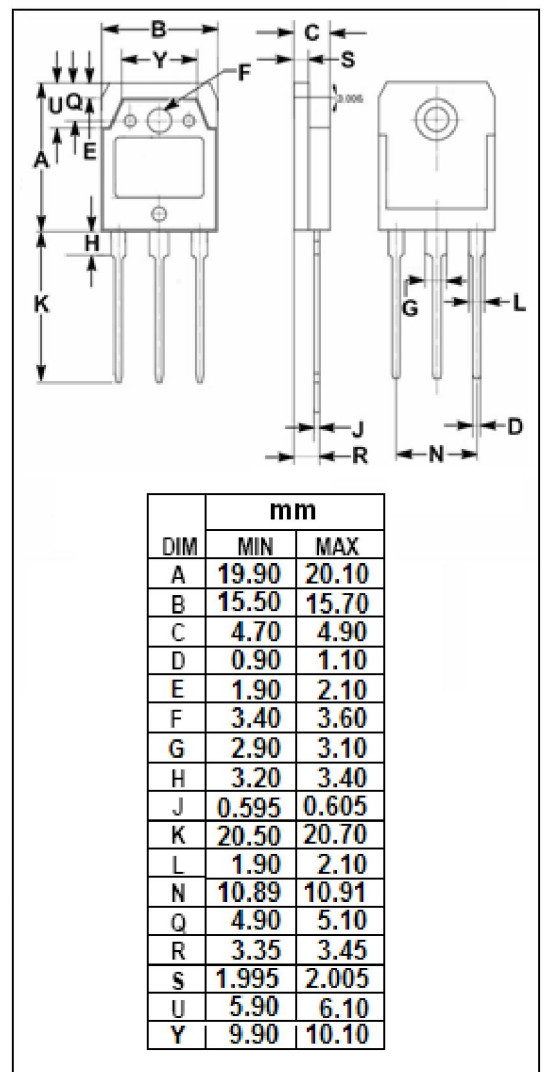
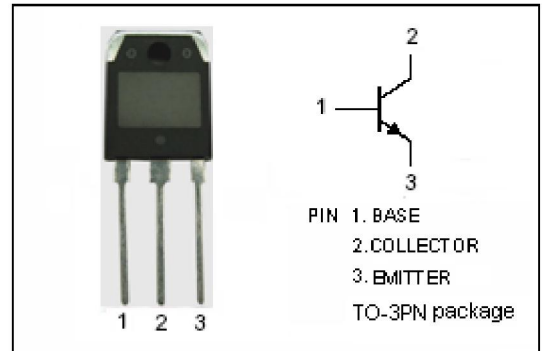
- Collector-Emitter Breakdown Voltage-  
 $V_{(BR)CEO} = 120V(\text{Min})$
- Good Linearity of  $h_{FE}$
- Complement to Type 2SA1490

**APPLICATIONS**

- For audio and general purpose applications

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	120	V
$V_{CEO}$	Collector-Emitter Voltage	120	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current-Continuous	8	A
$I_B$	Base Current-Continuous	3	A
$P_C$	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	80	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



**isc Silicon NPN Power Transistor****2SC3854****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	$I_C=50\text{mA}; I_B=0$	120			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=3\text{A}; I_B=0.3\text{A}$			1.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=120\text{V}; I_E=0$			100	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=6\text{V}; I_C=0$			100	$\mu\text{A}$
$h_{FE}$	DC Current Gain	$I_C=3\text{A}; V_{CE}=4\text{V}$	50			
$f_T$	Current-Gain—Bandwidth Product	$I_E=-0.5\text{A}; V_{CE}=12\text{V}$		20		MHz