

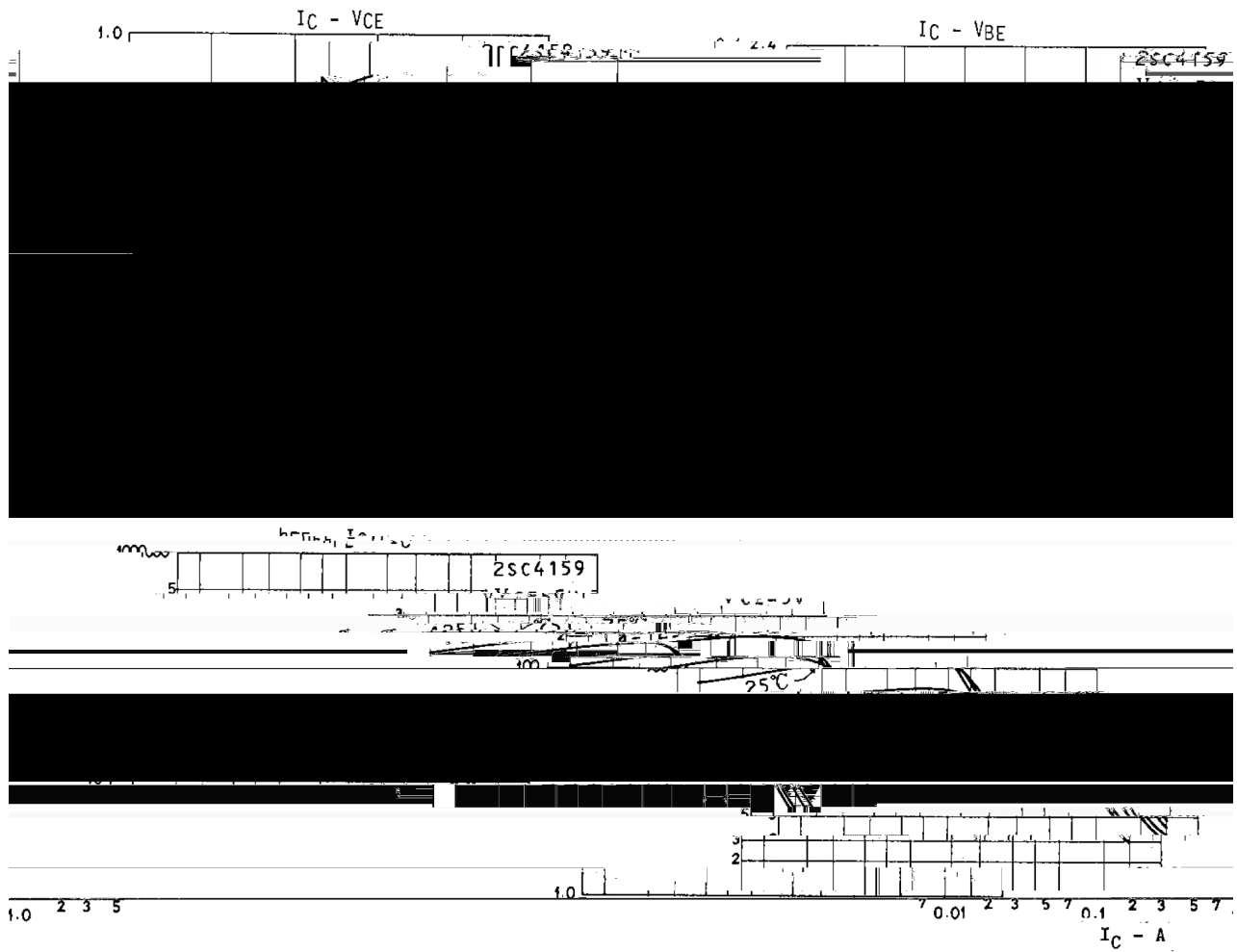
Rev.F Mar.-2016

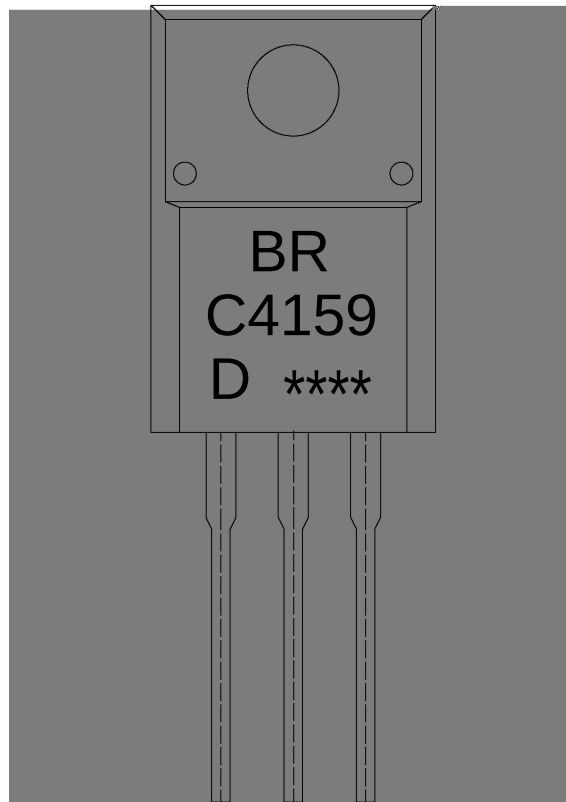
TO-220F NPN Silicon NPN transistor in a TO-220F Plastic Package.

High voltage.

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	180	V
Collector to Emitter Voltage	V_{CEO}	160	V
Emitter to Base Voltage	V_{EBO}	6.0	V
Collector Current - Continuous	I_C	1.5	A
Collector Current – Continuous(Pulse)	I_{cp}	3.0	A
Collector Power Dissipation	$P_C(T_c=25^\circ C)$	15	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 ~ 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=1.0mA$ $I_E=0$	180			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=1.0mA$ $R_{BE}=\infty$	160			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=1.0mA$ $I_C=0$	6.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=120V$ $I_E=0$			10	A
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=4.0V$ $I_C=0$			10	A
DC Current Gain	h_{FE}	$V_{CE}=5.0V$ $I_C=300mA$	60		200	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA$ $I_B=50mA$		0.3		V
Base to Emitter Voltage	V_{BE}	$V_{CE}=5.0V$ $I_C=10mA$			1.5	V
Transition Frequency	f_T	$V_{CE}=10V$ $I_C=50mA$		100		MHz





BR

C4159

D:

h_{FE}

Note:

BR:

Company Code.

C4159:

Product Type.

D:

h_{FE} Classifications Symbol

****:

Lot No. Code, code change with Lot No.

