



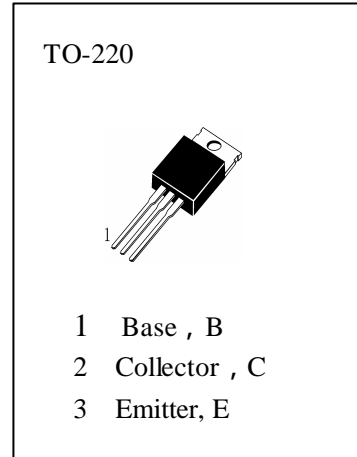
# HC4054

## APPLICATIONS

Switching Power .

### ABSOLUTE MAXIMUM RATINGS ( $T_a=25$ )

$T_{stg}$ —Storage Temperature.....	-65~150
$T_j$ —Junction Temperature.....	150
$P_C$ —Collector Dissipation ( $T_c=25$ ) .....	30W
$V_{CBO}$ —Collector-Base Voltage.....	600V
$V_{CEO}$ —Collector-Emitter Voltage.....	450V
$V_{EBO}$ —Emitter-Base Voltage.....	7V
$I_C$ —Collector Current.....	5A
$I_B$ —Base Current.....	2A



### ELECTRICAL CHARACTERISTICS ( $T_a=25$ )

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV <sub>CEO(SUS)</sub>	Collector-Emitter Sustaining Voltage	450			V	$I_C=100mA, I_B=0$
I <sub>CBO</sub>	Collector Cutoff Current			0.1	mA	$V_{CB}=600V, I_E=0$
I <sub>EBO</sub>	Emitter-Base Cutoff Current			0.1	mA	$V_{EB}=7V, I_C=0$
I <sub>CEO</sub>	Collector Cutoff Current			0.1	mA	$V_{CE}=450V, I_B=0$
H <sub>FE</sub> ( 1 )	DC Current Gain	10				$V_{CE}=5V, I_C=2.5A$
H <sub>FE</sub> ( 2 )		5				$V_{CE}=5V, I_C=1mA$
V <sub>CE(sat1)</sub>	Collector- Emitter Saturation Voltage			1	V	$I_C=2.5A, I_B=0.5A$
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage			1.5	V	$I_C=2.5mA, I_B=0.5A$
f <sub>T</sub>	Current Gain-Bandwidth Product		20		MHz	$V_{CE}=10V, I_C=0.5A,$
t <sub>ON</sub>	Turn-On Time			0.5	μS	} $I_C=2.5A,$ $I_{B1}=0.5A, I_{B2}=1A$ $V_{BB2}=4V, R_L=60$
t <sub>STG</sub>	Storage Time			2	μS	
t <sub>F</sub>	Fall Time			0.2	μS	