



## BUH2M20AP

### HIGH VOLTAGE NPN SILICON POWER TRANSISTOR

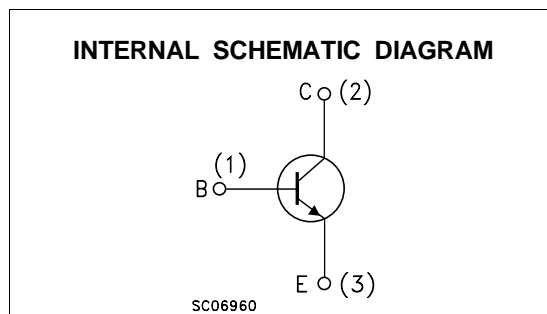
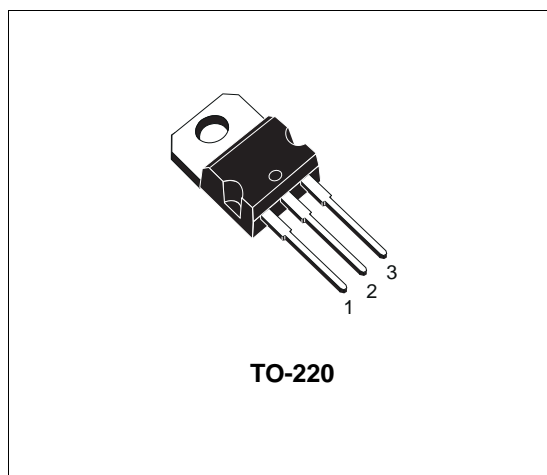
- EXTRA HIGH VOLTAGE CAPABILITY
- LOW OUTPUT CAPACITANCE
- CHARACTERIZED FOR LINEAR MODE OPERATION.

#### APPLICATIONS:

- DESIGNED SPECIFICALLY FOR DYNAMIC FOCUS IN CTV AND MONITOR.

#### DESCRIPTION

The BUH2M20AP is manufactured using Multi-epitaxial Mesa technology for cost-effective high performance.



#### ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
$V_{CB0}$	Collector-Base Voltage ( $I_E = 0$ )	2000	V
$V_{CE0}$	Collector-Emitter Voltage ( $I_B = 0$ )	1200	V
$V_{EB0}$	Emitter-Base Voltage ( $I_C = 0$ )	5	V
$I_C$	Collector Current	30	mA
$I_{CM}$	Collector Peak Current ( $t_p < 5$ ms)	40	mA
$P_{tot}$	Total Dissipation at $T_c = 25$ °C	20	W
$T_{stg}$	Storage Temperature	-65 to 150	°C
$T_j$	Max. Operating Junction Temperature	150	°C

# BUH2M20AP

## THERMAL DATA

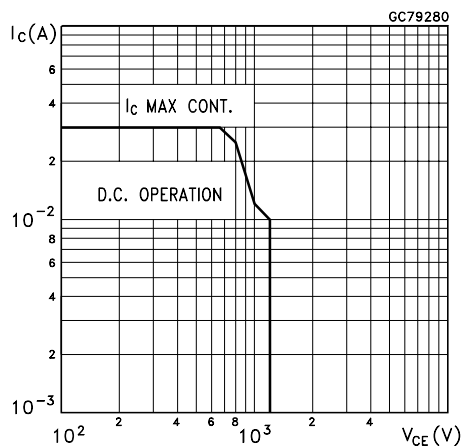
$R_{thj-case}$	Thermal Resistance Junction-case	Max	6.25	$^{\circ}C/W$
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## ELECTRICAL CHARACTERISTICS ( $T_{case} = 25^{\circ}C$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
$I_{CBO}$	Collector Cut-off Current ( $I_E = 0$ )	$V_{CE} = 2000 V$			5	$\mu A$
$I_{EBO}$	Emitter Cut-off Current ( $I_C = 0$ )	$V_{EB} = 4 V$			10	$\mu A$
$V_{CEO}$	Collector-Emitter Breakdown Voltage	$I_C = 1 mA$	1200			V
$V_{EBO}$	Emitter-Base Voltage ( $I_C = 0$ )	$I_E = 10 \mu A$	5			V
$V_{CE(sat)*}$	Collector-Emitter Saturation Voltage	$I_C = 2 mA$ $I_B = 400 \mu A$			5	V
$V_{BE(sat)*}$	Base-Emitter Saturation Voltage	$I_C = 2 mA$ $I_B = 400 \mu A$			2	V
$h_{FE*}$	DC Current Gain	$I_C = 2 mA$ $V_{CE} = 10 V$ $I_C = 10 mA$ $V_{CE} = 10 V$	10 10			
$C_{ob}$	Output Capacitance	$V_{CB} = 100 V$ $I_C = 0$ $f = 1 MHz$		3		pF

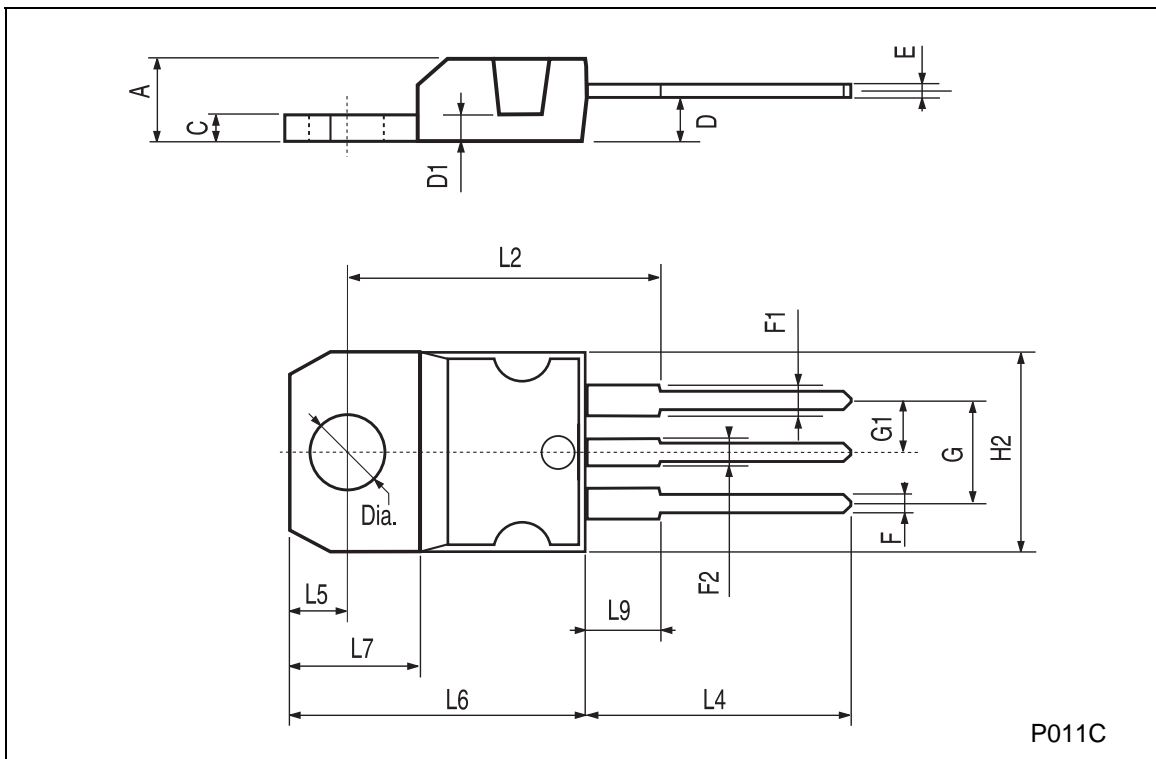
\* Pulsed: Pulse duration = 300  $\mu s$ , duty cycle 1.5 %

## Safe Operating Area



**TO-220 MECHANICAL DATA**

DIM.	mm			inch		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A	4.40		4.60	0.173		0.181
C	1.23		1.32	0.048		0.051
D	2.40		2.72	0.094		0.107
D1		1.27			0.050	
E	0.49		0.70	0.019		0.027
F	0.61		0.88	0.024		0.034
F1	1.14		1.70	0.044		0.067
F2	1.14		1.70	0.044		0.067
G	4.95		5.15	0.194		0.203
G1	2.4		2.7	0.094		0.106
H2	10.0		10.40	0.393		0.409
L2		16.4			0.645	
L4	13.0		14.0	0.511		0.551
L5	2.65		2.95	0.104		0.116
L6	15.25		15.75	0.600		0.620
L7	6.2		6.6	0.244		0.260
L9	3.5		3.93	0.137		0.154
DIA.	3.75		3.85	0.147		0.151



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