BUH2M20AP

HIGH VOLTAGE NPN SILICON POWER TRANSISTOR

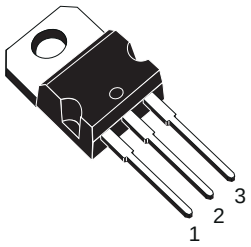
- EXTRA HIGH VOLTAGE CAPABILITY
- LOW OUTPUT CAPACITANCE
- CHARACTERIZED FOR LINEAR MODE OPERATION.

APPLICATIONS:

- DESIGNED SPECIFICALLY FOR DYNAMIC FOCUS IN CTV AND MONITOR.

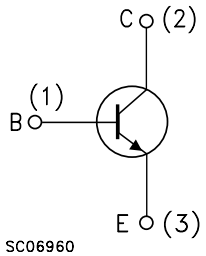
DESCRIPTION

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



TO-220

INTERNAL SCHEMATIC DIAGRAM



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage (I_E = 0)	2000	V
V_{CEO}	Collector-Emitter Voltage (I_B = 0)	1200	V
V_{EBO}	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

THERMAL DATA

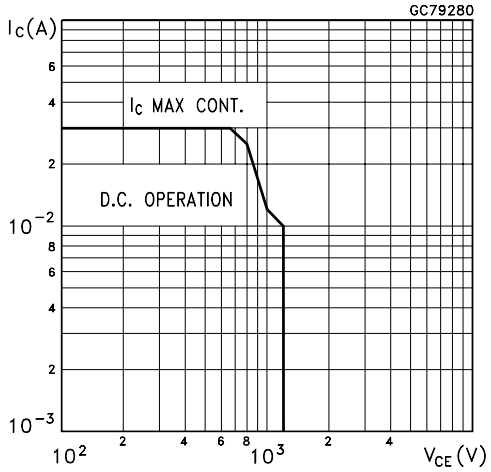
$R_{thj\text{-}case}$	Thermal Resistance Junction-case	Max	6.25	$^oC/W$

ELECTRICAL CHARACTERISTICS (T_{case} = 25 ^oC 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	µA
I_{EBO}	Emitter Cut-off Current (I_C = 0)	V_{EB} = 4 V			10	µA
V_{CEO}	Collector-Emitter Breakdown Voltage	IC = 1 mA	1200			V
V_{EBO}	Emitter-Base Voltage (I_C = 0)	I_E = 10 µA	5			V
$V_{CE(sat)}$*	Collector-Emitter Saturation Voltage	I_C = 2 mA I_B = 400 µA			5	V
$V_{BE(sat)}$*	Base-Emitter Saturation Voltage	I_C = 2 mA I_B = 400 µA			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 = 1MHz		3		pF

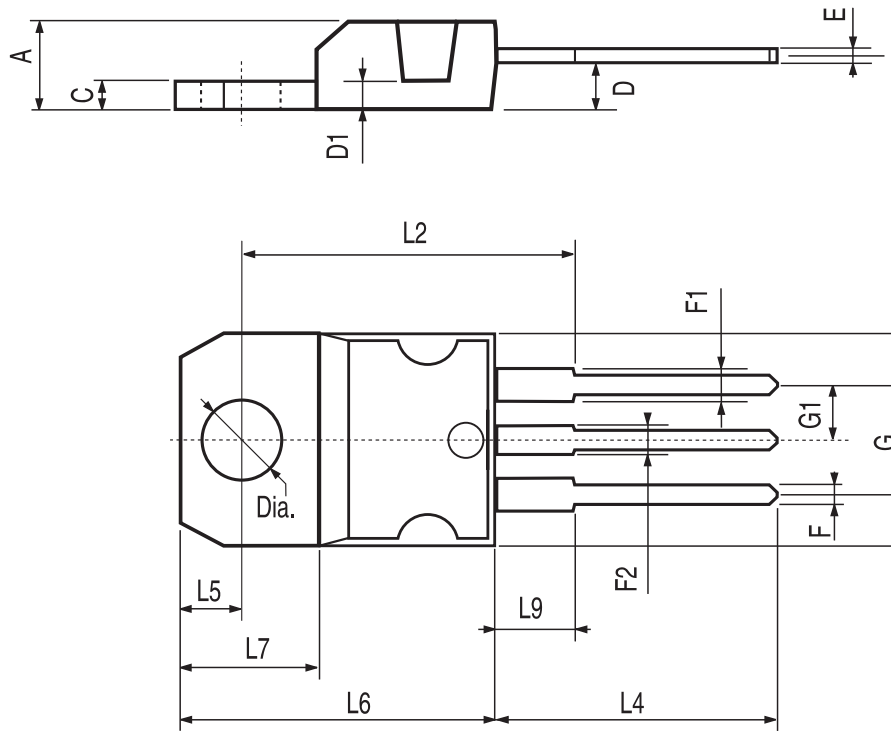
* Pulsed: Pulse duration = 300 µs, duty cycle 1.5 %

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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