

Description

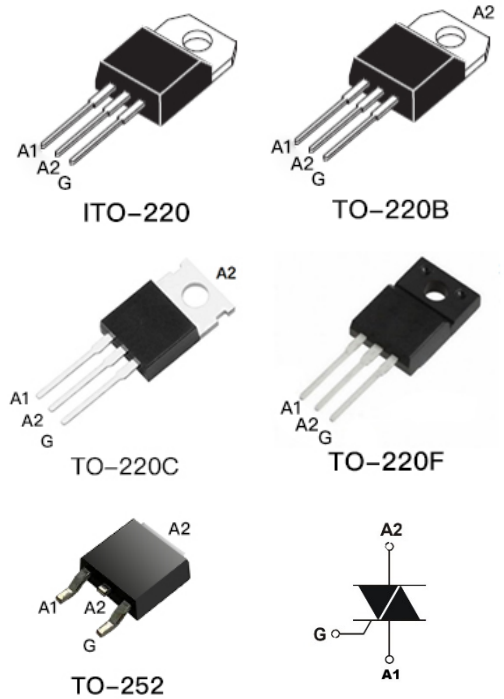
Available in high power packages, the suitable for general purpose AC switching.

Features

- High current TRIAC
- Low thermal resistance with clip bonding
- High commutation capability

Applications

- General purpose AC switch control
- Control loads in Motor, Fan, and Pump.
- Solenoid drivers
- LED Dimming
- Inrush current limiting circuits



Absolute Maximum Ratings ($T_A=25^\circ\text{C}$)

Rating		Symbol	Value
Peak repetitive off-state voltage ($T_J = -40$ to $+150^\circ\text{C}$, Full sine wave, 50Hz to 60Hz; Gate open) (Note 1)		V_{DRM} V_{RRM}	800V
On-state RMS current (full sine wave)		$I_{\text{T(RMS)}}$	6A
Non repetitive surge peak on-state current (full cycle, $T_{\text{initial}} = 25^\circ\text{C}$)	F=50Hz, t=20ms	I_{TSM}	52A
	F=60Hz, t=16.7ms		55A
I^2t Value for fusing	$t_p=10\text{ms}$	I^2t	$12\text{A}^2\text{s}$
Critical rate of rise of on-state current $I_G=2I_{\text{GT}}$	F=120Hz, $T_J=150^\circ\text{C}$	di/dt	$50\text{A}/\mu\text{s}$
Non repetitive surge peak off-state voltage	$t_p=10\text{ms}$, $T_J=25^\circ\text{C}$	$V_{\text{DSM}}/V_{\text{RSM}}$	$V_{\text{DRM}}/V_{\text{RRM}}+100\text{V}$
Peak gate current	$t_p=20\mu\text{s}$, $T_J=150^\circ\text{C}$	I_{GM}	2A
Average gate power dissipation	$T_J=150^\circ\text{C}$	$P_{\text{G(AV)}}$	4W
Operating junction and storage temperature ranges		T_J, T_{STG}	-40°C to $+150^\circ\text{C}$

Note:

1. V_{DRM} and V_{RRM} for all types can be applied on a continuous basis.

Blocking voltages shall not be tested with a constant current source such that the voltage ratings of the devices are exceeded.

Electrical Characteristics ($T_J=25^\circ\text{C}$, unless otherwise specified)

Parameter		Symbol	Value
$V_D=12\text{V}, R_L=33\Omega$	I-II-III	$I_{GT \text{ Max.}}$	10mA
	ALL	$V_{GT \text{ Max.}}$	1.2V
$V_D=V_{DRM}, R_L=100\Omega, T_J=125^\circ\text{C}$	ALL	$V_{GD \text{ Min.}}$	0.2V
$I_T=100\text{mA}$		$I_H \text{ Max.}^{(1)}$	15mA
$I_G=1.2I_{GT}$	I-III	$I_L \text{ Max.}$	20mA
	II		40mA
$V_D=67\%V_{DRM}$ gate open, $T_J=150^\circ\text{C}$		$dv/dt \text{ Min.}^{(1)}$	200V/ μs

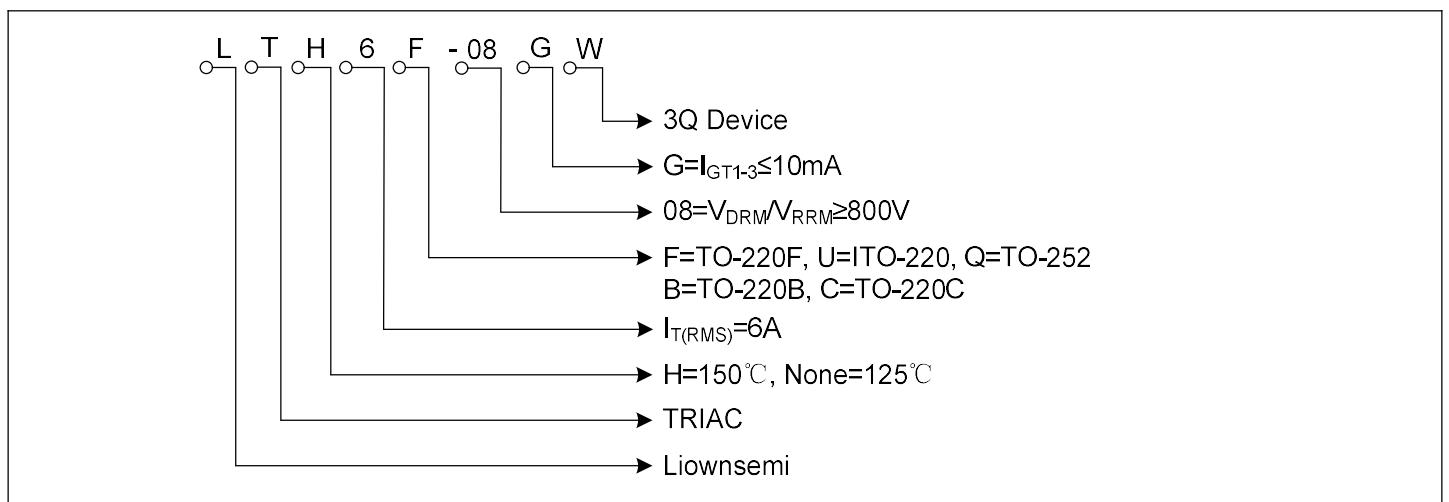
1. for both polarities of A2 referenced to A1

Static Characteristics

Test conditions	Symbol	Value
$I_{TM}=6\text{A}, t_P=380\mu\text{s}, T_J=25^\circ\text{C}$	$V_T \text{ Max.}^{(1)}$	1.5V
Threshold voltage, $T_J=150^\circ\text{C}$	$V_{t0} \text{ Max.}^{(1)}$	0.95V
Dynamic resistance, $T_J=150^\circ\text{C}$	$R_D \text{ Max.}^{(1)}$	100m Ω
$V_{DRM}=V_{RRM}, T_J=25^\circ\text{C}$	$I_{DRM} \text{ Max.}$	5 μA
$V_{DRM}=V_{RRM}, T_J=150^\circ\text{C}$	$I_{RRM} \text{ Max.}$	2mA

1. for both polarities of A2 referenced to A1

Part Number Code



Ordering Information

Part Number	Marking	Package
LTH6U-08GW	LTH6U-08GW	ITO-220
LTH6B-08GW	LTH6B-08GW	TO-220B
LTH6C-08GW	LTH6C-08GW	TO-220C
LTH6F-08GW	LTH6F-08GW	TO-220F
LTH6Q-08GW	LTH6Q-08GW	TO-252

Dimensions

ITO-220	Symbol	Millimeters	
		Min.	Max.
	A	9.80	10.40
	B	2.65	3.10
	C	14.80	16.10
	D	0.70	0.92
	D1	1.18	1.42
	E	2.40	2.70
	L	2.80	4.20
	L1	13.05	13.60
	H	5.85	6.82
	K	2.35	2.75
	T	4.38	4.61
	T1	1.15	1.36
	T2	0.35	0.65
	ΦR	3.75	3.95

Dimensions

TO-220B	Symbol	Millimeters	
		Min.	Max.
	A	9.80	10.40
	B	2.65	3.10
	C	14.80	16.10
	D	0.70	0.92
	D1	1.18	1.42
	E	2.40	2.70
	L	2.80	4.20
	L1	13.05	13.60
	H	5.85	6.82
	K	2.35	2.75
	T	4.38	4.61
	T1	1.15	1.36
	T2	0.35	0.65
	ΦR	3.75	3.95

TO-220C	Symbol	Millimeters	
		Min.	Max.
	A	9.70	10.40
	B	6.13	6.82
	C	9.00	9.40
	D	0.70	0.92
	D1	1.18	1.45
	D2	1.22	1.32
	E	2.34	2.74
	L	15.70	16.14
	L1	9.60	10.60
	L2	12.60	13.60
	K	2.20	2.75
	T	4.30	4.71
	T1	1.20	1.42
	T2	0.38	0.65
ΦR	3.55	3.78	

Dimensions

TO-220F	Symbol	Millimeters	
		Min.	Max.
	A	9.96	10.36
	B	2.70 REF.	
	D	0.50	0.75
	D1	1.50	1.75
	D2	1.10	1.35
	E	2.54 TYP.	
	H	14.80	15.20
	K	2.50	2.90
	L	28.00	28.40
	L1	1.70	1.90
	L2	1.90	2.10
	T	4.30	4.70
	T1	2.80	3.20
	T2	0.50	0.75
	ΦR	3.50 REF.	

TO-252	Symbol	Millimeters	
		Min.	Max.
	A	6.50	6.70
	B	6.00	6.20
	C	5.284	5.384
	D	0.71	0.81
	D1	0.81	0.91
	E	2.236	2.336
	K	0.967	1.087
	L	9.80	10.10
	L1	0.70	0.90
	L2	1.40	1.60
	T	2.20	2.40
	T1	0.498	0.518

Important Notice and Disclaimer

LLOWN has used reasonable care in preparing the information included in this document, but LLOWN does not warrant that such information is error free. LLOWN assumes no liability whatsoever for any damages incurred by you resulting from errors in or omissions from the information included herein.

LLOWN no warranty, representation or guarantee regarding the documents, circuits and products specification, LLOWN reservation rights to make changes for any documents, products, circuits and specifications at any time without notice.

Purchasers are solely responsible for the choice, selection and use of the LLOWN products and services described herein, and LLOWN assumes no liability whatsoever relating to the choice, selection or use of the products and services described herein.

No license, express or implied, by implication or otherwise under any intellectual property rights of LLOWN.

Resale of LLOWN products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by LLOWN for the LLOWN product or service described herein and shall not create or extend in any manner whatsoever, any liability of LLOWN.

单击下面可查看定价，库存，交付和生命周期等信息

[>>Liown\(里阳半导体\)](#)