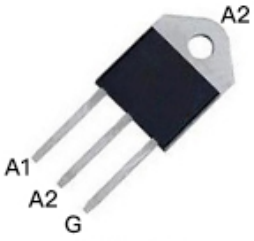
Description

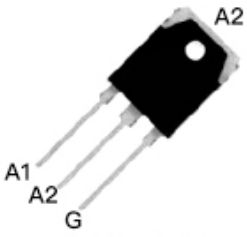
Available in high power packages, the suitable for general purpose AC switching.

Features

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



TO-3P



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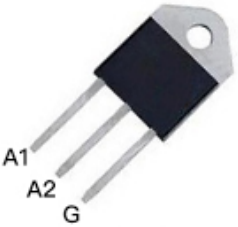
Applications

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



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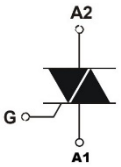


Absolute Maximum Ratings (T_A=25℃)

Rating		Symbol	Value
Peak repetitive off-state voltage (T_J = -40 to +125℃, Full sine wave, 50Hz to 60Hz; Gate open) (Note 1)		V_{DRM} V_{RRM}	800V
On-state RMS current (full sine wave)		$I_{T(RMS)}$	41A
Non repetitive surge peak on-state current (full cycle, T initial = 25℃)	F=50Hz, t=20ms	I_{TSM}	400A
	F=60Hz, t=16.7ms		400A
I^2t Value for fusing	t_P=10ms	I^2t	600A^2s
Critical rate of rise of on-state current I_G=2I_{GT}	F=120Hz, T_J=125℃	di/dt	80A/μs
Non repetitive surge peak off-state voltage	t_P=10ms, T_J=25℃	V_{DSM}/V_{RSM}	V_{DRM}/V_{RRM}+100V
Peak gate current	t_P=20μs, T_J=125℃	I_{GM}	8A
Average gate power dissipation	T_J=125℃	$P_{G(AV)}$	1W
Storage junction temperature range		T_{STG}	-40℃ to +150℃
Operating junction temperature range		T_J	-40℃ to +125℃

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℃, unless otherwise specified)

Parameter		Symbol	Value	
V_D=12V, R_L=33Ω	I-II-III	$I_{GT\ Max.}$	35mA	50mA
	ALL	$V_{GT\ Max.}$	1.2V	1.2V
V_D=V_{DRM}, R_L=100Ω, T_J=125℃	ALL	$V_{GD\ Min.}$	0.2V	0.2V
I_T=100mA		$I_{H\ Max.}$ (1)	50mA	75mA
I_G=1.2I_{GT}	I-III	$I_{L\ Max.}$	60mA	80mA
	II		80mA	100mA
V_D=67%V_{DRM} gate open, T_J=125℃		$I_{H\ Max.}$ (1)	500V/μs	1000V/μs

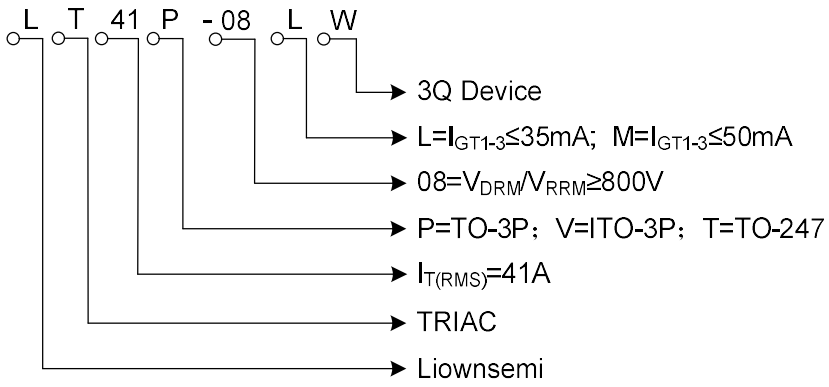
1. for both polarities of A2 referenced to A1

Static Characteristics

Test conditions	Symbol	Value
I_{TM}=41A, t_P=380μs, T_J=25℃	$V_{T\ Max.}$ (1)	1.4V
Threshold voltage, T_J=125℃	$V_{t0\ Max.}$ (1)	0.95V
Dynamic resistance, T_J=125℃	$R_{D\ Max.}$ (1)	200mΩ
V_{DRM}=V_{RRM}, T_J=25℃	$I_{DRM\ Max.}$	5μA
V_{DRM}=V_{RRM}, T_J=125℃	$I_{RRM\ Max.}$	5mA

1. for both polarities of A2 referenced to A1

Part Number Code

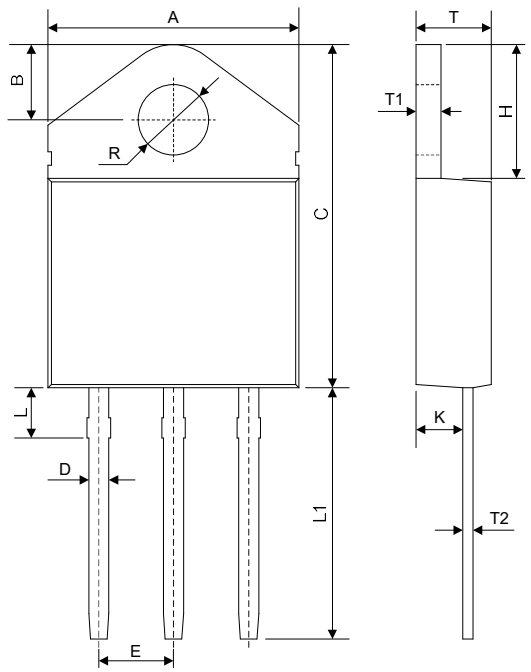


Ordering Information

Part Number	Marking	Package
LT41P-08LW	LT41P-08LW	TO-3P
LT41P-08MW	LT41P-08MW	TO-3P
LT41V-08LW	LT41V-08LW	ITO-3P
LT41V-08MW	LT41V-08MW	ITO-3P
LT41T-08LW	LT41T-08LW	TO-247
LT41T-08MW	LT41T-08MW	TO-247

Dimensions

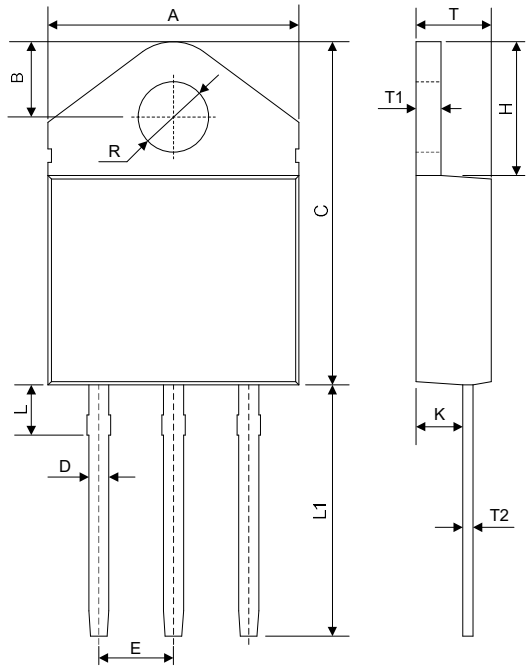
TO-3P



Symbol	Millimeters	
	Min.	Max.
A	14.9	15.35
B	4.1	4.65
C	20.21	20.75
D	1.12	1.32
E	5.35	5.62
H	7.85	8.22
K	2.71	2.92
L	2.5	3.2
L1	15.02	15.55
T	4.38	4.65
T1	1.42	1.62
T2	0.52	0.68
ΦR	4.12	4.31

Dimensions

ITO-3P



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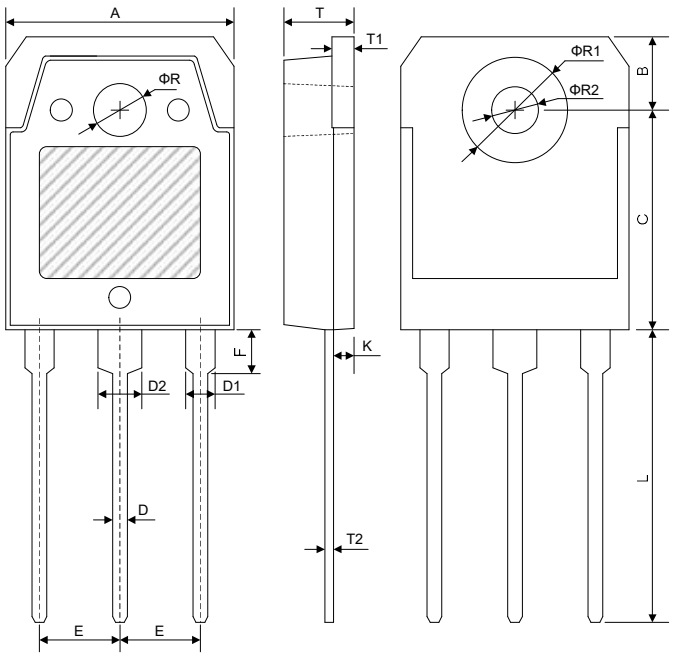

Symbol	Millimeters	
	Min.	Max.
A	15.55	15.65
B	4.90	5.10
C	14.80	15.00
D	1.00	
D1	2.00	
D2	2.95	3.05
E	5.35	5.55
F	2.90	3.10
K	1.33	1.43
L	20.00	20.20
T	4.75	4.85
T1	1.492	1.508
T2	0.585	0.615
ΦR	3.50	
ΦR1	7.00	
ΦR2	3.20	

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