

3QL100AK Thru 3QL100AS

1. 外型尺寸 Feature & Dimension

Features

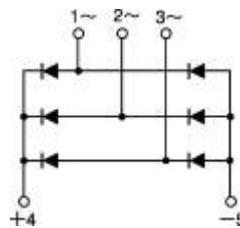
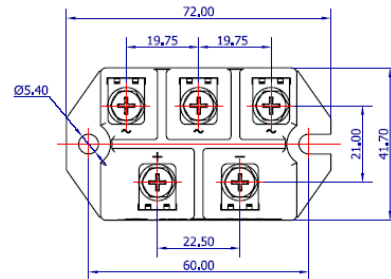
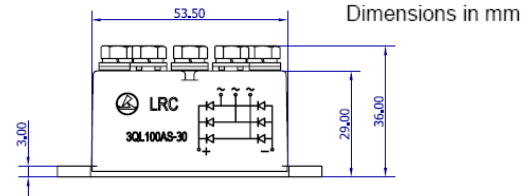
- Package with screw terminals
- Isolation voltage 3000 V~
- Glass passivated chips
- Blocking voltage up to 1600 V
- Low forward voltage drop
- UL registered E231047

Applications

- Supplies for DC power equipment
- Input rectifiers for PWM inverter
- Battery DC power supplies
- Field supply for DC motors

Advantages

- Easy to mount with two screws
- Space and weight savings
- Improved temperature and power cycling



2. 产品性能 Product Characteristic

ELECTRICAL AND THERMAL CHARACTERISTICS

TC=25°C unless otherwise specified

Item	Symbol	3QL100AK	3QL100AO	3QL100AQ	3QL100AS	Unit
Maximum repetitive voltage	VRM	800	1200	1400	1600	V
Maximum RMS Voltage	VRMS	560	840	980	1120	
Maximum DC Blocking Voltage	VDC	800	1200	1400	1600	V
Peak Reverse Current (per leg) @Tj = 25°C	IR	≤0.5				mA
At Rated DC Blocking Voltage @Tj = 125°C						≤5
Average recified forward current 60Hz sine wave,R-load with heatsink Tc=100	Io	100				A
TJ=45 t=10ms (50Hz),sine VR=0 t=8.3ms(60Hz),sine TJ=150 t=10ms (50Hz),sine VR=0 t=8.3ms(60Hz),sine	IFSM	1000				A
		1080				
		800				
		860				
TJ=45 t=10ms (50Hz),sine VR=0 t=8.3ms(60Hz),sine	I2t	5000				A2s
		5830				

T _J =150 t=10ms (50Hz),sine V _R =0 t=8.3ms(60Hz),sine		3200 3700	
Storage temperature	T _{stg}	-40 to +150	
50/60Hz RMS t=1 min I _{SOL} ≤1mA t=1 s	VISOL	2500 3000	V~
Mounting torque(M5) Terminal connection torque(M5)	Md	5±15%	N·m
typical	Weight	160	g
I _F =200A T _J =125	V _F	1.4	V
For power-loss calculations only	V _{T0}	0.8	V
per diode DC current Per module	R _{thJC}	0.9 0.15	k/w k/w
per diode DC current(typ.) per module(typ.)	R _{thCS}	0.42 0.07	k/w k/w
Creeping distance on surface	dS	10	mm
Creeping distance in air	dA	9.4	mm
Max. allowable acceleration	a	50	m/s ²

3QL100AK Thru 3QL100AS

3. 特性曲线 Characteristic Curve

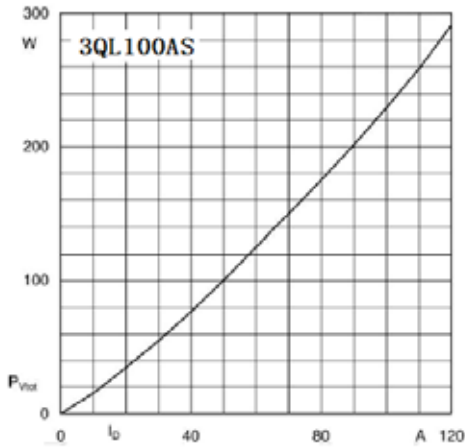


Fig.1. Power dissipation vs. output current

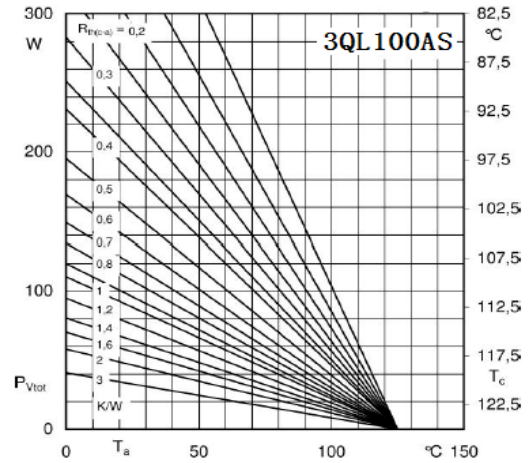


Fig.2. Power dissipation vs. case temperature

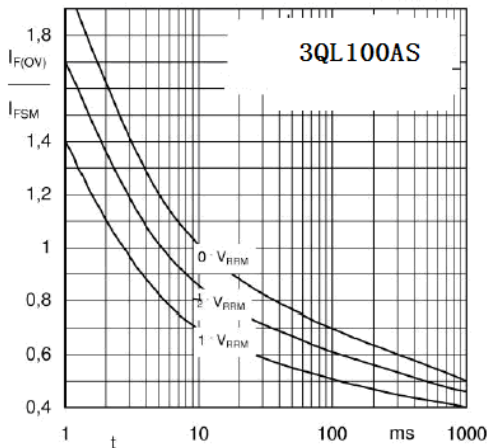


Fig.3. Surge overload characteristics vs. time

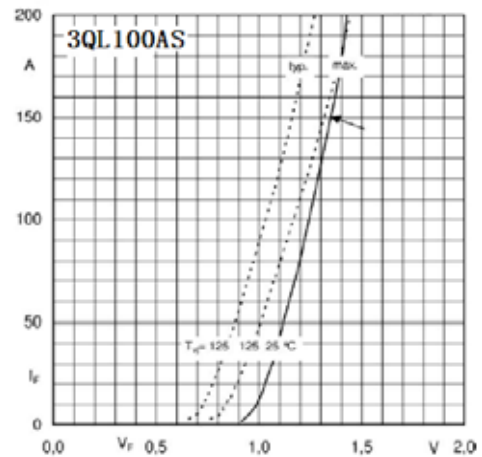


Fig.4. Forward characteristics of a diode arm

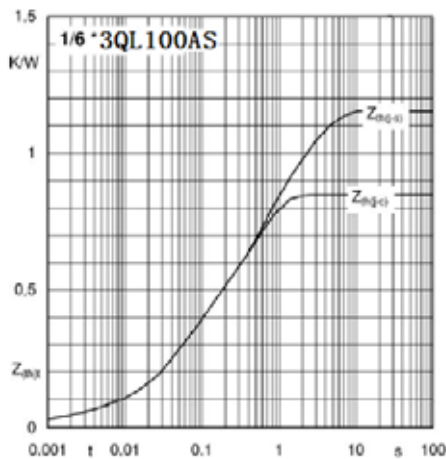
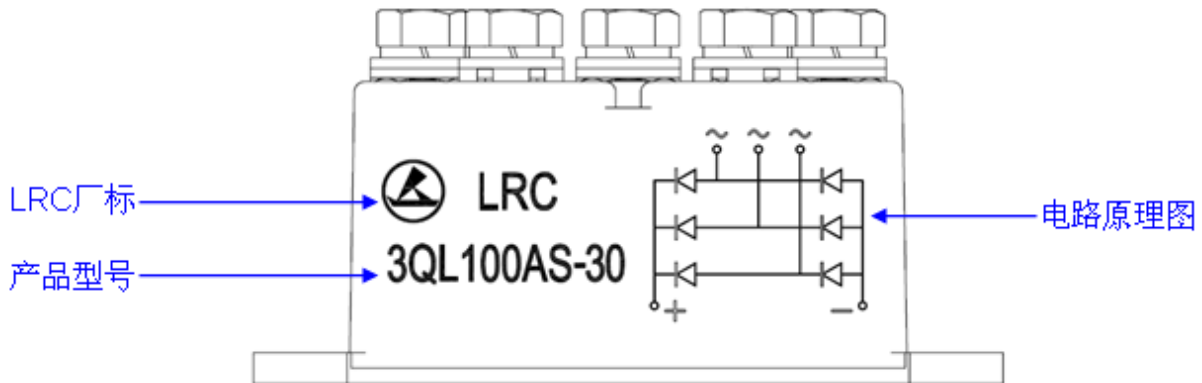


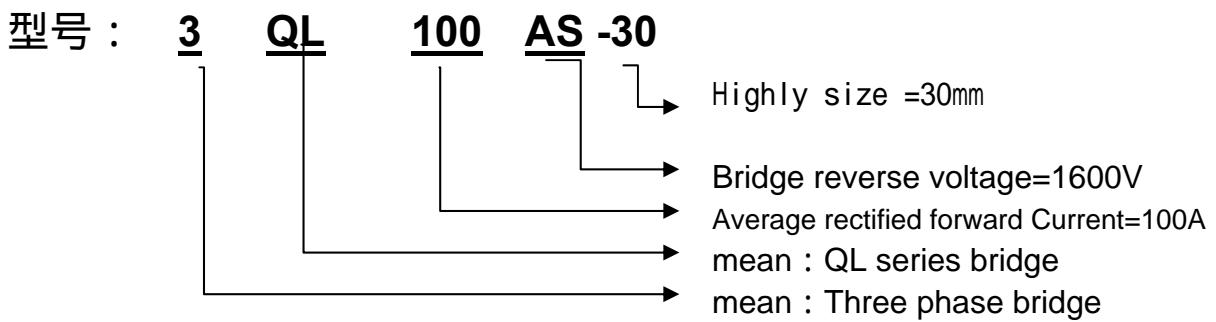
Fig.5. Transient thermal impedance vs. time

3QL100K Thru 3QL100AS

4. 印字规范 Marking Identification



Note :



3QL100AK Thru 3QL100AS

5.Update Record

版次	更新记录	更新作者	更新日期
1	第一版	王锋	2011-4-29