

# QL100A/1600V



## Single-phase Bridge-rectifier

### Features

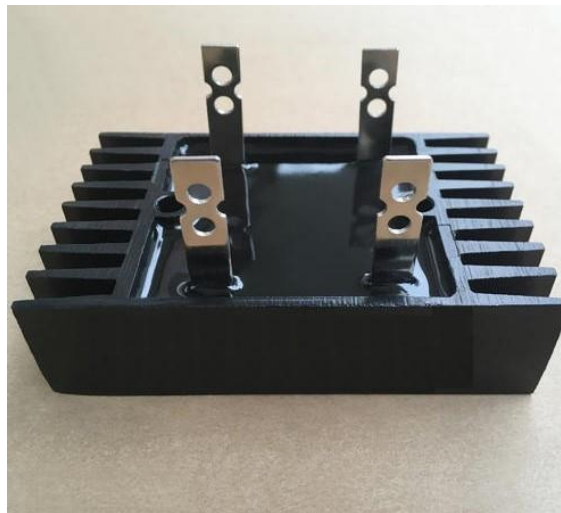
- Low forward voltage drop
- Baseboard AC2500V

### Typical Applications

- DC power supply for instrument
- AC/DC motor controls
- Welder machine
- Frequency converter
- Battery charge and discharge

### Features

- Convenient installation
- Compact and lightweight
- Sensitive to temperature



### ■ Maximum Value

Sign	Parameters Name	Rated Value	Unit
		QL100A/1600V	
$V_{RRM}$	Repetitive peak reverse voltage	1600	V
$V_{RSM}$	Nonrepetitive peak reverse voltage	1700	V

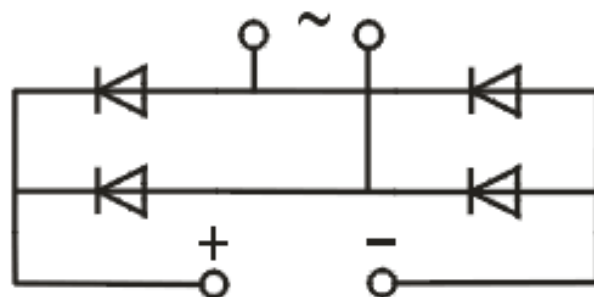
Sign	Parameters Name	Test conditions	Rated Value	Unit
$I_F (AV)$	Average forward current	180° Sinusoid half wave 50HZ Single side heat dissipation $T_C=55^\circ C$	100	A
$I_{FSM}$	Peak collector current	$t=10ms, 50HZ, sin, T_{jm}$	1000	A
$I^2t$	Maximum rated value $I^2t$		3000	$A^2S$
$V_{ISO}$	Insulation voltage	One minute of communication	2500	V
$T_j$	Junction temperature		-40 to +150	$^\circ C$
$T_{jm}$	Maximum junction temperature		150	$^\circ C$
$T_{stg}$	Storage temperature		-40 to +125	$^\circ C$
$M_d$	Mounting power M5		2	N m
$W_t$	Weight		230	g

### ■ Electrical characteristics

Sign	Parameters Name	Test conditions	Rated Value	Unit
$I_{RRM}$	Repetitive peak reverse current	$V_R=V_{RRM}$ , Sinusoid half wave, $T_j=25^\circ C$	150	$\mu A$
		$V_R=V_{RRM}$ , Sinusoid half wave, $T_j=150^\circ C$	30	mA
$V_{FM}$	Peak forward voltage drop	$I_{FM}=100A, T_j=25^\circ C$	1.2	V
$R_{th(j-c)}$	Thermal resistance(junction to case)	Single side heat dissipation, Sinusoid half wave	1.6	$^\circ C/W$

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( a ) Circuit Diagram



( b)Dimensions

