



Single Phase Diode Bridges

QL5-QL50



Features

- Current:5-300A, Voltage:100-1600V
- All models feature the same compact dimensions to provide a uniform mounting pitch
- Glass passivated diode chip
- Excellent power/volume ratio, High thermal conductivity
- Package, electrically insulated case

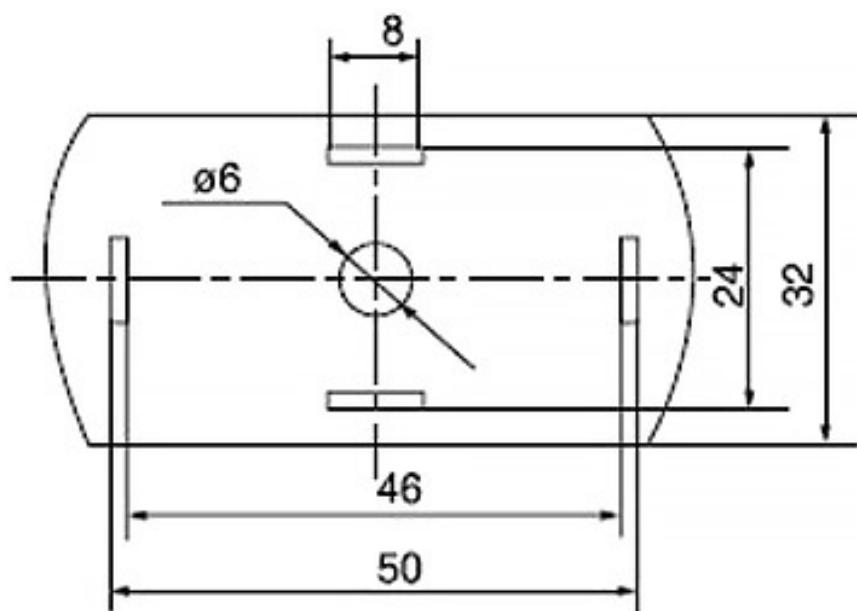
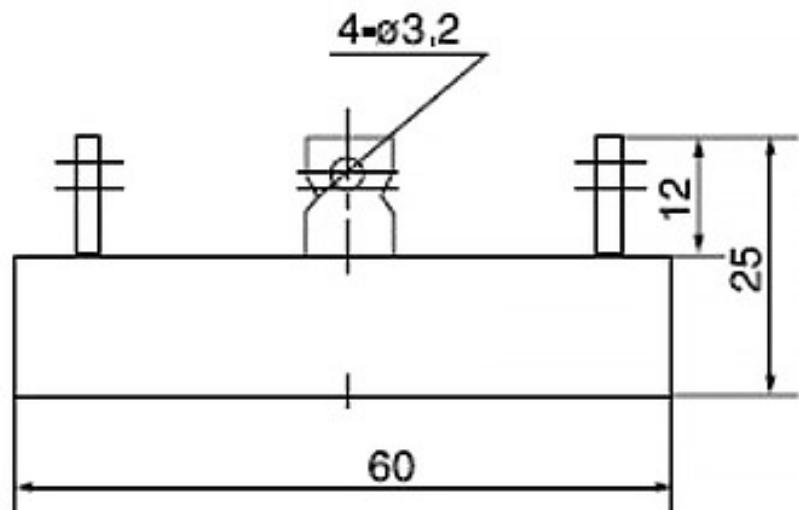
V_{RRM}	=	100-1600 V
I_D	=	5-50 A
V_F	=	1.1 V
I_{FSM}	=	175 A

Typical Applications

- Eliminator supply, industrial automatic control
- Numerical-controlled machinery, telecontrol system

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	VALUE		UNIT
			Min	Max	
I_D	Output current	180° sine wave, 50Hz	5	50	A
V_{RRM}	Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM}$ tp=10ms $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 100V$	100	1600	V
V_{RMS}	RMS current		70	860	V
V_{DC}	DC blocking voltage		100	1600	V
I_{FSM}	Surge on-state current	sine wave		175	A
V_F	Diode forward voltage	$I_F = 17.5A$		1.1	V
I_R	Reverse leakage current	$T_a = 25^\circ C$		10	uA
$I_{R(H)}$		$T_a = 100^\circ C$		200	uA
$R_{th(j-c)}$	Thermal impedance node to the shell	180° sine wave, single heat sink		5.0	°C/W
$R_{th(c-a)}$	Thermal impedance (shell to powder)	180° sine wave, single heat sink		8	°C/W
V_{iso}	Insulation voltage		2500		V
T_J	Stored temperature		-40	125	°C
T_{stq}	Stored temperature		-40	150	°C
W_t	Weight			47	g

DIMENSIONS



TOPOLOGY OF INTERNAL CONNECTION

