

Non-isolated Diode Module, 100A

Features

- Low voltage three-phase
- Easy construction
- High surge current capability
- Non-isolated

**Voltage Ratings** ($T_A = 25^\circ\text{C}$, unless otherwise noted)

Type number	Voltage Code	V_{RRM} , Maximum repetitive peak reverse voltage (V)	V_{RSM} , Maximum non-repetitive peak reverse voltage (V)	V_{DRM} , Maximum repetitive peak off-state voltage (V)	I_{RRM} , Maximum reverse leakage current @ T_{JMAX} (mA)
DWF106A	20	200	300	200	15
	40	400	500	400	
	60	600	700	600	
	80	800	900	800	
	100	1000	1100	1000	
	120	1200	1300	1200	
	160	1600	1700	1600	

Electrical Characteristics ($T_C = 25^\circ\text{C}$ unless otherwise noted)

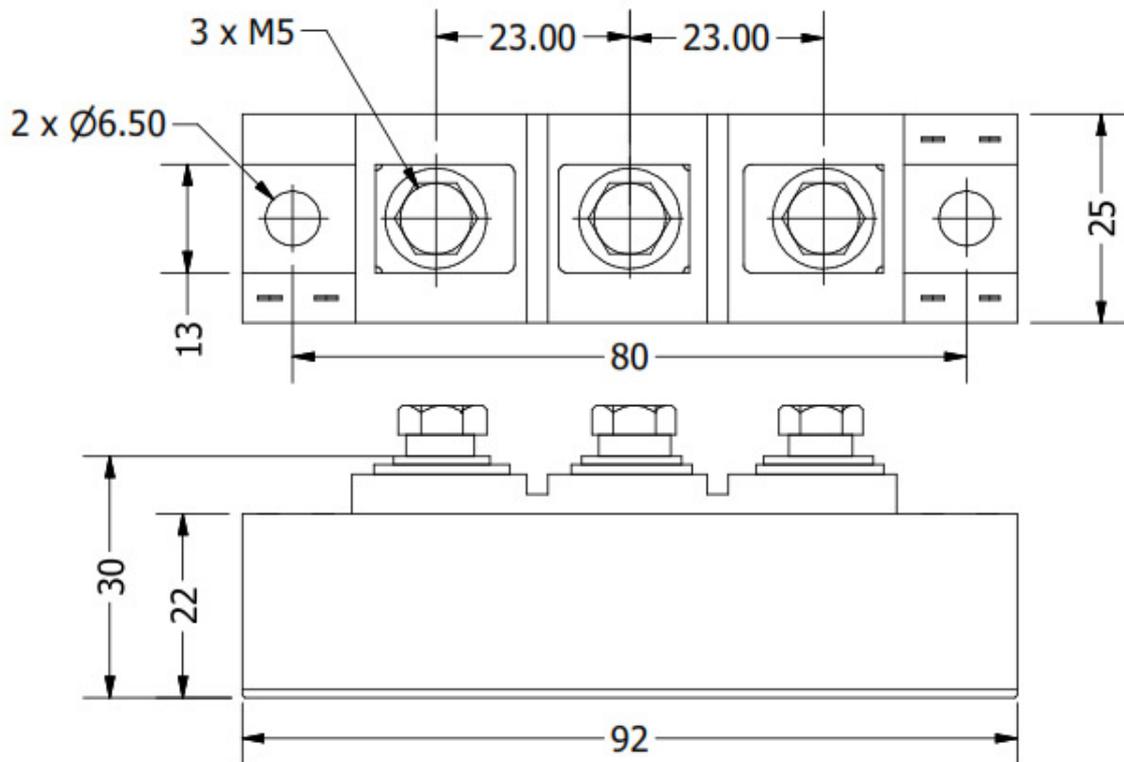
Parameter	Symbol	Values	Units
Maximum average forward current @ $T_J = 85^\circ\text{C}$	$I_{F(AV)}$	100	A
Maximum average RMS forward current	I_{FRMS}	157	A
Maximum non-repetitive surge current	I_{FSM}	2000	A
Maximum I^2t for fusing	I^2t	16500	A^2s
Forward voltage drop	V_{FM}	1.3	V

Thermal & Mechanical Specifications ($T_C = 25^\circ\text{C}$ unless otherwise noted)

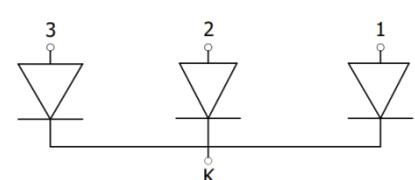
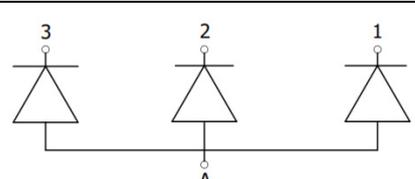
Parameter	Symbol	Values	Units
Operating junction temperature range	T_J	-30 to +150	$^\circ\text{C}$
Storage temperature	T_{stg}	-30 to +125	$^\circ\text{C}$
Thermal resistance, junction to case	$R_{th(jc)}$	0.25	$^\circ\text{C}/\text{W}$
Mounting torque	to heatsink	2.7	Nm
	to terminals	2.7	
Weight	W	240	g

Package Outline

(All dimensions in mm)



Circuit Configuration

Circuit Description	Configuration Code	Circuit Drawing
Common cathode (base plate cathode)	N	
Common anode (base plate anode)	R	



Ordering Table

<i>DWF</i>	<i>100</i>	<i>A</i>	<i>160</i>	<i>N/R</i>
1	2	3	4	5

- 1 – Non-isolated Diode Module
- 2 – Current Rating = $I_F (AV)$
- 3 – Package Type
- 4 – Voltage Code (see Voltage Ratings table)
- 5 – Circuit (see Circuit Configuration table)