

## Diode-Diode Module, 82 Amps

**Features**

- Improved glass passivation for high reliability
- Exceptional stability at high temperatures
- High di/dt and dv/dt capabilities
- Low thermal resistance

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

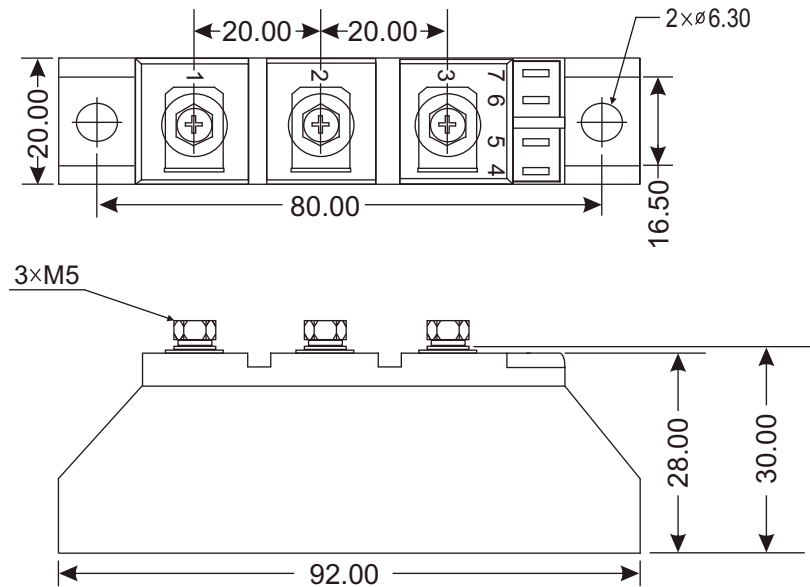
Type number	Voltage Code	$V_{RRM}$ , Maximum repetitive peak reverse voltage (V)	$V_{RSM}$ , Maximum non-repetitive peak reverse voltage (V)	$V_{DRM}$ , Maximum repetitive peak off-state voltage (V)	$I_{RRM}$ , Maximum reverse leakage current @ $T_{JMAX}$ (mA)
NDD81	60	600	700	600	max. 5
	80	800	900	800	
	100	1000	1100	1000	
	120	1200	1300	1200	
	140	1400	1500	1400	
	160	1600	1700	1600	
	180	1800	1900	1800	

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

Parameter	Symbol	Values	Units
Maximum average forward current @ $T_J = 85^\circ\text{C}$	$I_{F(AV)}$	82	A
Maximum average RMS forward current	$I_{F(RMS)}$	128	A
Maximum non-repetitive surge current	$I_{FSM}$	2000	A
Maximum $I^2t$ for fusing	$I^2t$	20000	$\text{A}^2\text{s}$
Forward voltage drop	$V_{FM}$	max. 1.5	V
Isolation voltage	$V_{ISO}$	3000	V

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

Parameter	Symbol	Values	Units
Operating junction temperature range	$T_J$	-40 to +125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40 to +125	$^\circ\text{C}$
Thermal resistance, junction to case	$R_{th(JC)}$	0.4	$^\circ\text{C}/\text{W}$
Mounting torque	to heatsink	$4 \pm 15\%$	Nm
	to terminals	$3 \pm 15\%$	
Weight	W	100	g

**Package Outline**
*(All dimensions in mm)*

**Circuit Configuration**

Circuit Description	Configuration Code	Circuit Drawing
Series Connection (doubler circuit)	N	
Common Anode	A	
Common Cathode	K	



## Ordering Table

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<i>NDD</i>	<i>81</i>	<i>N</i>	<i>160</i>
1	2	3	4

1 – Power Module

- > DD = Diode-Diode
- > TD = Thyristor-Diode
- > TT = Thyristor-Thyristor

2 – Current Rating =  $I_{F(AV)}$

3 – Circuit Configuration (see Table)

4 – Voltage Code (see Voltage Ratings table)