

Diode-Diode Module, 700 Amps

Features

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



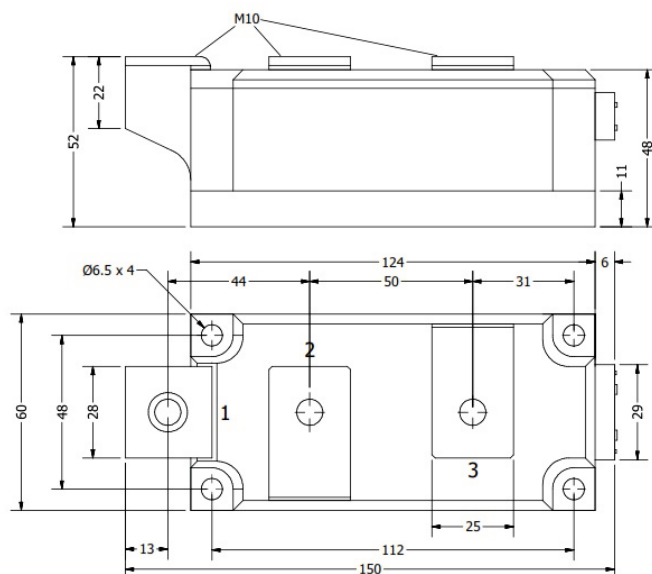
Voltage Ratings ($T_A = 25^\circ\text{C}$, unless otherwise noted)				
Type number	Voltage Code	V_{RRM} , Maximum repetitive peak reverse voltage (V)	V_{RSM} , Maximum non-repetitive peak reverse voltage (V)	I_{RRM} , Maximum reverse leakage current @ T_{JMAX} (mA)
NDD701 H	200	2000	2100	max. 30
	220	2200	2300	

Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)			
Parameter	Symbol	Values	Units
Maximum average forward current @ $T_C = 85^\circ\text{C}$	$I_{F(AV)}$	700	A
Maximum average RMS forward current	$I_{F(RMS)}$	1100	A
Maximum non-repetitive surge current	I_{FSM}	25000	A
Maximum I^2t for fusing	I^2t	3125000	A^2s
Forward voltage drop	V_{FM}	max. 1.3	V
Isolation voltage, 1 min.	V_{ISO}	4000	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 +160	$^\circ\text{C}$
Storage temperature		T_{stg}	-40 to +125	$^\circ\text{C}$
Thermal resistance, junction to case	per diode	$R_{th(JC)}$	0.07	$^\circ\text{C/W}$
Mounting torque	to heatsink	F	$5 \pm 15\%$	Nm
	to terminals		$10 \pm 15\%$	
Weight		W	1500	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

NDD	701	N	220	H
1	2	3	4	5

1 – Power Module

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

2 – Current Rating = $I_T(AV)$

3 – Circuit Configuration (see Table)

4 – Voltage Code (see Voltage Ratings table)

5 – Isolation Voltage

- > None = 3000V, 1 min.
- > H = 4000V, 1 min.