Thyristor-Thyristor Module, 143 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°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)
NTT162 H	200	2000	2100	2000	max. 30
	220	2200	2300	2200	

Electrical Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Values	Units
Maximum average forward current @ T_J = 85°C	$I_{T(AV)}$	143	A
Maximum average RMS forward current	$I_{T(RMS)}$	225	A
Maximum non-repetitive surge current	I_{TSM}	5200	A
Maximum I^2t for fusing	I^2t	135200	A^2s
Forward voltage drop	V_{TM}	max. 1.6	V
Critical rate of rise of on-state current	di/dt	max. 200	A/µs
Critical rate of rise of off-state voltage	dv/dt	max. 1000	V/µs
Gate current required to trigger	I_{GT}	min. 150	mA
Gate voltage required to trigger	V_{GT}	min. 2	V
Maximum holding current	I_H	150	mA
Maximum latching current	I_L	300	mA
Isolation voltage	V_{ISO}	4000	V

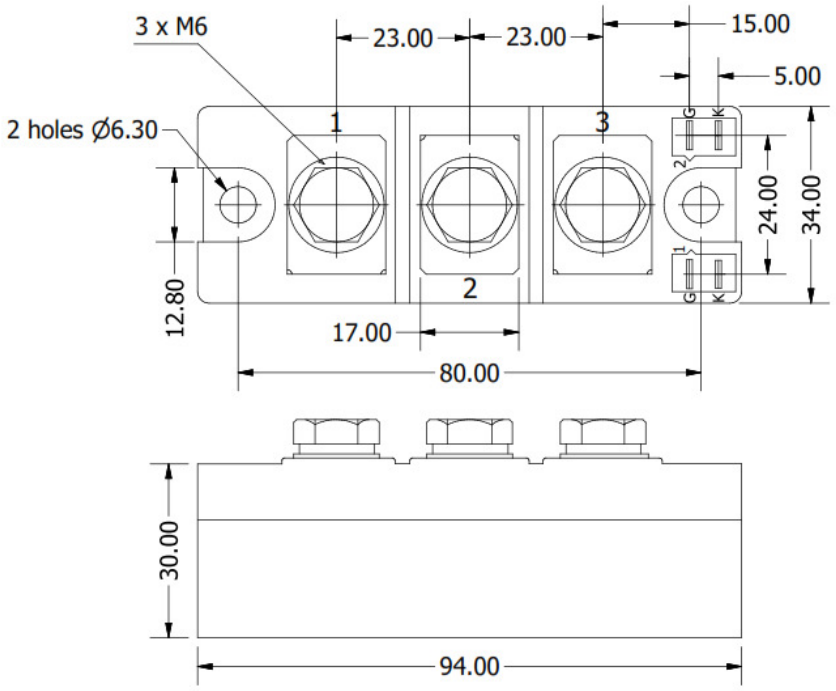
Thermal & Mechanical Specifications (T_A = 25°C unless otherwise noted)

Parameter		Symbol	Values	Units
Operating junction temperature range		T_J	-40 to +125	°C
Storage temperature		T_{stg}	-40 to +125	°C
Thermal resistance, junction to case		$R_{th(JC)}$	0.16	°C/W
Mounting torque	to heatsink	F	5 ± 15%	Nm
	to terminals		5 ± 15%	
Weight		W	220	g

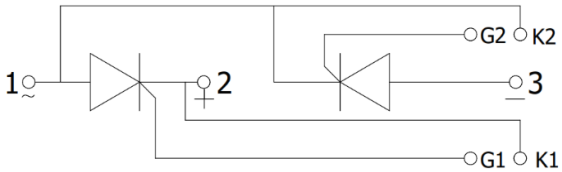
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Package Outline

(All dimensions in mm)



Circuit Configuration

Circuit Description	Configuration Code	Circuit Drawing
Series Connection (doubler circuit)	N	

Ordering Table

NTT	*162*	*N*	*200*	*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 – High Voltage (2000V, 2200V)

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