V_{RSM} V	V_{RRM} V_{DRM} V	(dv/dt)cr V/µs	I_{TRMS} (maximum value for continuous operation) 2800A I_{TAV} (sin. 180; Tcase =…; DSC) 1780A (55°C)
900	800	500	MDT1200C08 E
1300	1200	1000	MDT1200C12 E
1500	1400	1000	MDT1200C14 E
1700	1600	1000	MDT1200C16 E

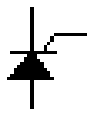
SEMIKRON Electronics P. Ltd.

Thyristor

MDT1200



Symbol	Conditions	MDT 1200	Units
I_{TAV}	Sin 180 ; (Tcase = 85°C); DSC	1200	A
I_{TSM} i^2t	Tvj = 25°C; 10ms Tvj = 125°C; 10ms Tvj = 25°C; 8.3…10ms Tvj = 125°C; 8.3…10ms	30000 25500 4500 3250	A A kA^2S kA^2S
tgd tgr (di/dt)cr I_H I_L tq	Tvj = 25°C; I_G = 1 A d_{iG} / dt = 1A/µs V_D=0.67*V_{DRM} f = 50…60Hz Tvj = 25°C; typ./max. Tvj = 25°C; R_G=33Ω; typ./max. Tvj = 125°C; typ.	Typ.1 Typ.2 125 250/500 0.5/2 100…250	µs µs A/µs mA A µs
V_T $V_{T(TO)}$ r_T $I_{DD;}$ I_{RD}	Tvj = 25°C; I_T =3600A;max. Tvj = 125°C Tvj = 125°C Tvj = 125°C; V_{RD} = V_{RRM} V_{DD} = V_{DRM}	1.65 0.95 0.18 100	V V mΩ mA
V_{GT} I_{GT} V_{GD} I_{GD}	Tvj = 25°C Tvj = 25°C Tvj = 125°C Tvj = 125°C	5 250 0.25 10	V mA V mA
Rthjc Rthch T_{vj} T_{stg}	cont. sin. 180; DSC/SSC rec.120; DSC/SSC DSC/SSC	0.021 0.0225/0.054 0.027/0.060 0.005/0.010 -40….+125 -40…+130	°C/W °C/W °C/W °C/W °C °C
F W	SI units US units	25 … 25 5000…5600 477	kN lbs. g



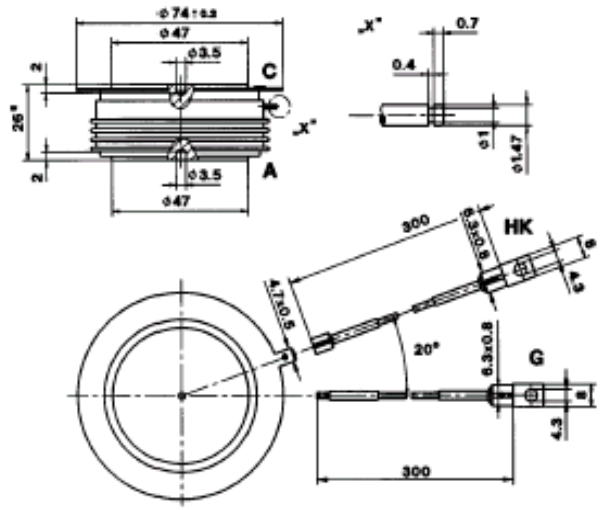
Features.

- Capsule packages for double sided cooling.
- Hermetic metal cases with glass insulators.
- Off-state and reverse voltages up to 1600V.

Typical Applications.

- DC Motor Control. (e.g. for machine tools)
- Controlled Rectifiers. (e.g. for battery charging)
- AC Controllers. (e.g. for temperature control)

MDT1200



C: Cathode terminal (red sleeve)
A: Anode terminal
G: Gate terminal (yellow sleeve)
HK: Auxiliary cathode terminal (red sleeve)

Dimensions in mm

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