

KG200A-D

HIGH FREQUENCY THYRISTOR



Features

- Interdigitated amplifying gates
- Fast turn-on and high di/dt
- Short turn-off time and low switching losses
- Hermetic metal cases with ceramic insulators

Application

- Inductive heating
- Electronic welders
- Self-commutated inverters
- AC motor speed control
- General power switching applications

$I_{T(AV)}$	200A
V_{DRM}/V_{RRM}	800-1400 V
t_q	8~12 μ s
I_{TSM}	2.4KA

Symb.		parameter	Test Conditions	T_J ($^{\circ}$ C)	Value	Unit
Current Ratings	$I_{T(AV)}$	average on-state current	180°half sine wave 50Hz Double side cooled $T_{hs}=55^{\circ}$ C	50Hz 6KHz	115	200 A
	I_{TSM}	Surge on-state current	10ms half sine wave $V_R=0.6V_{RRM}$	115	2.4	KA
	I^2t	I^2t for fusing coordination		115	29	KA ² S
Characteristics	V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM}=V_{DRM}$ & $V_{RRM}+100V$	115	800-1400	V
	I_{DRM} I_{RRM}	Repetitive peak current	$V_{DM}=V_{DRM}$ $V_{RM}=V_{RRM}$	115	Max.30	mA
	V_{TO}	Threshold voltage		115	Max.1.67	V
	V_{TM}	Peak on-state voltage	$I_{TM}=600A$, F=7.0KN	25	Max.3.2	V
	r_T	On-state slop resistance		115	Max.1.32	m Ω
	I_H	Holding current	$V_A=12V$, $I_A=1A$	25	20-250	ma
Dynamic Parameters	dv/dt	Critical rate of rise of off-state voltage	$V_{DM}=67\%V_{DRM}$	115	Max.200	V/ μ s
	di/dt	Critical rate of rise of on-state current	$V_{DM}=67\%V_{DRM}$ to 800A, Gate pulse $t_r \leq 0.5\mu$ s $I_{GM}=1.5A$	115	Max.200	A/ μ s
	t_q	Circuit commutated turn-off time	$I_{TM}=800A$, tp=1000 μ s, $V_R=50V$, di/dt=-20A/ μ s		8-12	μ s
	I_{rm}	Reserse recovery current	TM=800A, tp=1000 μ s, VR=50V dv/dt=30V/ μ s, di/dt=-20A/ μ s	115	Typ.30	
	t_{rr}	Reverse recovery time		115	Typ.2.5	μ s
	Q_{rr}	Recovery charge		115	Typ.38 Max.50	μ c

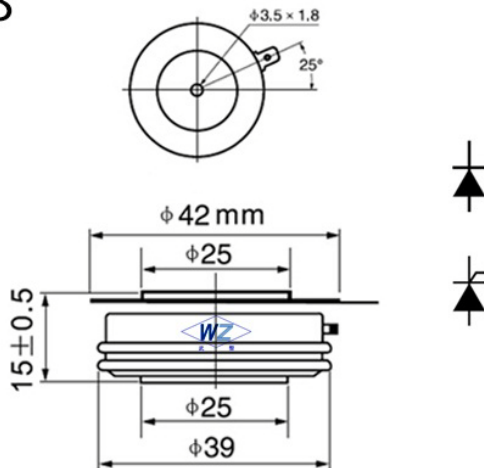
Gate Parameters	I_{GT}	Gate trigger current	$V_A=12V, I_A=1A$	25	30-200	mA
	V_{GT}	Gate trigger voltage		25	0.8-2.5	V
	V_{GD}	Non-trigger gate voltage	$V_{DM}=67\% V_{DRM}$	115	Min.0.3	V

Thermal & Mechanical Data

Symb.	parameter	Test Conditions	Value	Unit
$R_{th(j-h)}$	Thermal resistance Junction to heat sink	Double side cooled, mounting force 7.0KN	0.055	°C/W
F_m	Mounting force		5.3-10	KN
T_{stg}	Stored temperature		-40-+140	°C
W_t	Weight		80	g

Dimensions:

C8



Wuhan Wuzheng Rectifier Co., Ltd

Add: NO. 73 Gaoxin Five Road, East Lake New Technology Development Zone, Wuhan City, Hubei province.

Tel : 86-27-87001995

Fax: 86-27-87180920

Email: info@techele.com

Web: www.techele.com/en

cn-techele.en.alibaba.com