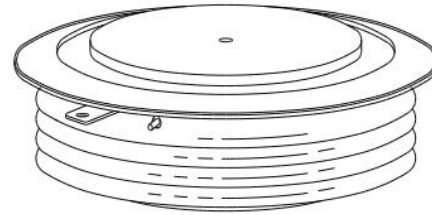


FEATURES

- High frequency operation
- Low forward voltage drop
- Low switching losses at high frequency
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- induction heating
- Motor control
- Choppers

ABSOLUTE MAXIMUM RATINGS

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{RRM}	Repetitive Peak Reverse Voltage		600	V
V_{DRM}	Repetitive Peak Forward Blocking Voltage		600	V
$I_{T(AV)}$	Average Forward Current	Sinewave, 180° conduction, $T_c=65^{\circ}\text{C}$	200	A
$I_{T(RMS)}$	RMS on-state current		315	A
I_{TSM}	Peak, one-cycle, non-repetitive surge current	10.0 msec (50Hz), sinusoidal wave shape, 180° conduction, $T_j = 125^{\circ}\text{C}$	4000	A
T_j	Junction Temperature		-40~125	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range		-40~140	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

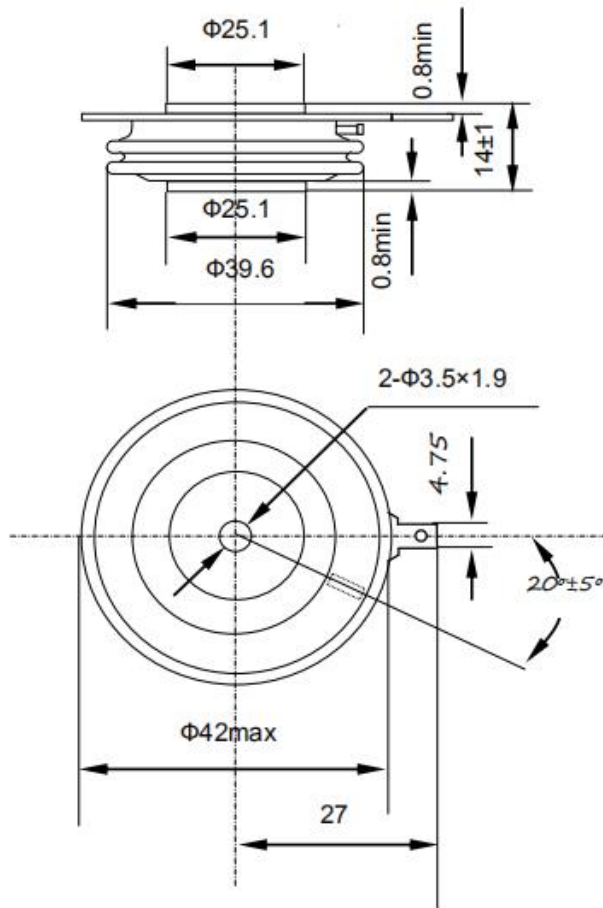
SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case, Double sided cooled	0.055	$^{\circ}\text{C}/\text{W}$

ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	TYPE	MAX	UNIT
V_{TM}	Forward Voltage Drop	$I_{TM} = 1500 A$		2.9	V
I_{DRM} I_{RRM}	peak reverse and off-state leakage current			25	mA
I_{GT}	DC gate current required to trigger	$V_D=12V, T_J = 25\text{ }^\circ\text{C}$		150	mA
V_{GT}	DC gate voltage required to trigger	$V_D=12V, T_J = 25\text{ }^\circ\text{C}$		3	V
t_q	Typical turn-off time	$I_{TM} = 200A, T_J = 125\text{ }^\circ\text{C}, di/dt = 12.5A/\mu s, V_R = 50V, dV/dt = 20V/\mu s$		20	μs

PACKAGE OUTLINE

Dimensions in mm (1mm = 0.0394")



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