ZB500A Avalan Diode

Feature

- Full diffusion process,capsule type ceramic package
- Amplifying gate structure at the center
- Double sided cooling,High current

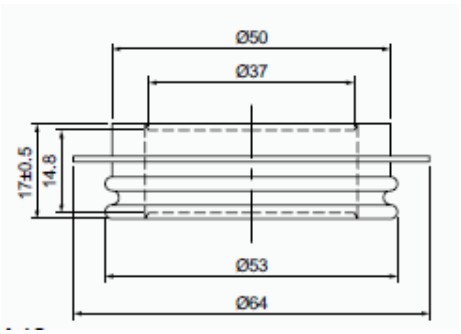
V_{RRM}	100-5000V
$I_{F(AV)}$	500A
I_{RRM}	40mA
r_T	0.8mΩ

Typical Application

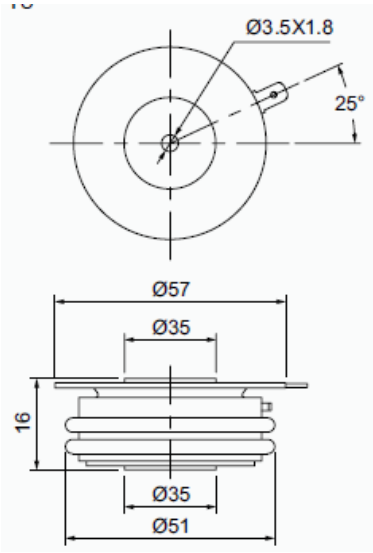
- High power converter
- DC and AC motor control,AC and DC switch
- Phase-controlled rectifying
- Active and reactive invresion

符号	参数	测试条件	参数值	单位
V_{RRM}	Repetitive peak reverse voltages	$T_{j\,min}<T_j<T_{j\,max}$,half-sine wave，180℃,50HZ	100-5000	V
I_{FAV}	Average forward current	Double side cooled，T_C=150℃,half-sine wave180℃,50HZ	500	A
I_{FRMS}	RMS forward current	Double side cooled，T_C=150℃,half-sine wave180℃,50HZ	785	A
I_{FSM}	Surge forward current	$T_j=T_{j\,max}$，T_j=25℃，180℃ half-sine wave,50HZ，single pulse，tq=10ms,V_R=0V	13.0 15.0	KA
		$T_j=T_{j\,max}$，T_j=25℃，180℃ half-sine wave,50HZ，single pulse，tq=8.5ms,V_R=0V	14.0 16.0	
I^2t	Safety factor	$T_j=T_{j\,max}$，T_j=25℃，180℃half-sine wave,50HZ，single pulse，tq=10ms,V_R=0V	845 1125	$A^{2S}*10^3$
		$T_j=T_{j\,max}$，T_j=25℃，180℃half-sine wave,50HZ，single pulse，tq=10ms,V_R=0V	810 1060	
V_{RSM}	Non-repetitive peak reverse voltages	$T_{j\,min}<T_j<T_{j\,max}$,half-sine wave，180℃,50HZ	200-5100	A
V_R	Reverse continuous voltages	$T_j=T_{j\,max}$	0.75 V_{RRM}	V
P_{RSM}	Surge reverse power dissipation	$T_j=T_{j\,max}$, 180℃half-sine wave tq=100us,50HZ	16	kw
V_{FM}	Peak forward voltage,max	T_j=25℃； I_{FM}=1570A	2.00	V
$V_{F(TO)}$	Forward threshold voltage	$T_j=T_{j\,max}$, 0.5 л I_{FAV} <I_T<1.5 л I_{FAV}	1.00	V
r_T	Forward slope resistance	$T_j=T_{j\,max}$, 0.5 л I_{FAV} <I_T<1.5 л I_{FAV}	0.800	mΩ
I_{RRM}	Repetitive peak reverse current	$T_j=T_{j\,max}$, V_R=V_{RRM}	40	mA
T_{stg}	Stored temperature	-60-150℃		
F_M	Mounting force		10-20	KN
W_t	Weight		0.14	kg
Outline				

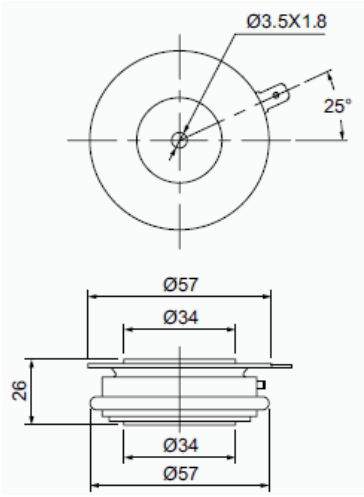
Outline：



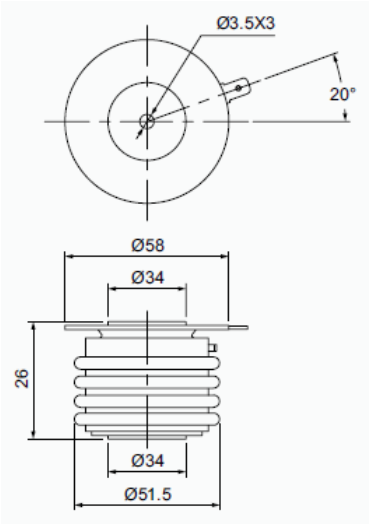
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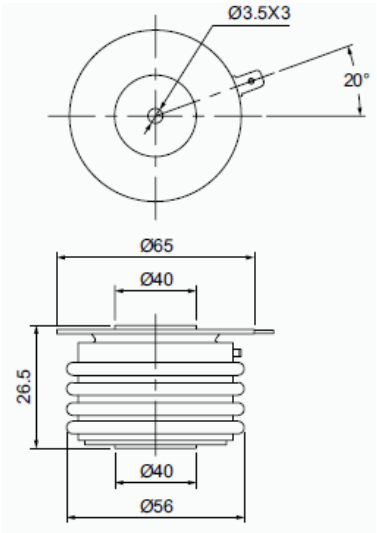
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