

**Features**

- Low forward voltage drop
- Soft recovery
- Hermetic metal cases with ceramic insulators

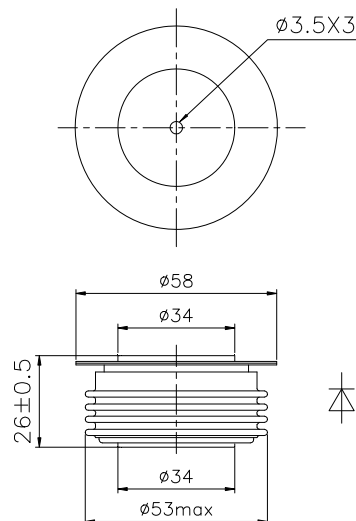
**Typical Applications**

- Inverters and choppers
- Motor control
- Snubber and free-wheeling diodes

<b>Part No. Y38ZKG-ZT33cT</b>		
<b>I<sub>F(AV)</sub></b>	<b>538A</b>	
<b>V<sub>RRM</sub></b>	<b>4000V</b>	<b>4200V</b>
	<b>4500V</b>	<b>5000V</b>

SYMBOL	CHARACTERISTIC	TEST CONDITIONS		T <sub>j</sub> (°C)	VALUE			UNIT	
					Min	Type	Max		
I <sub>F(AV)</sub>	Mean forward current	180° half sine wave 50Hz Double side cooled,	T <sub>C</sub> =85°C				538	A	
V <sub>RRM</sub>	Repetitive peak reverse voltage	tp=10ms		150	4000		5000	V	
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub>		150			50	mA	
I <sub>FSM</sub>	Surge forward current	10ms half sine wave		150			7.5	kA	
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>						281	A <sup>2</sup> s*10 <sup>3</sup>
V <sub>FO</sub>	Threshold voltage			150			1.89	V	
r <sub>F</sub>	Forward slope resistance							1.18	mΩ
V <sub>FM</sub>	Peak forward voltage	I <sub>TM</sub> =1000A, F=15kN		25			3.80	V	
I <sub>rm</sub>	Reverse recovery current			150		240		A	
t <sub>rr</sub>	Reverse recovery time	I <sub>TM</sub> =1000A, tp=4000μs, di/dt=-60A/μs, V <sub>R</sub> =100V					10		μs
Q <sub>rr</sub>	Recovery charge						720	900	μC
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 15kN					0.035	°C /W	
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink						0.008		
F <sub>m</sub>	Mounting force				10		20	kN	
T <sub>vj</sub>	Junction temperature				-40		150	°C	
T <sub>stg</sub>	Stored temperature				-40		160	°C	
W <sub>t</sub>	Weight					250		g	
Outline	ZT33cT								

**Outline:**



TECHSEM reserves the right to change specifications without notice.