**Features**

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

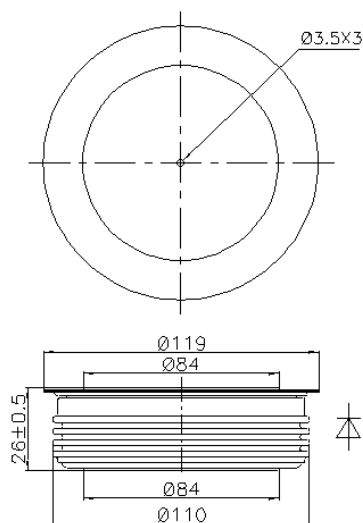
Typical Applications

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

Part No. Y89ZKD-ZT84cT

$I_{F(AV)}$	4000A	
V_{RRM}	2200V	2500V
	2800V	3000V

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j(^{\circ}C)$	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled, $T_c=85^{\circ}C$	150			4000	A
V_{RRM}	Repetitive peak reverse voltage	$t_p=10ms$	150	2100		3000	V
I_{RRM}	Repetitive peak current	at V_{RRM}	150			300	mA
I_{FSM}	Surge forward current	10ms half sine wave	150			44	kA
I^2t	I^2t for fusing coordination	$V_R=0.6V_{RRM}$	150			9680	$A^2s \cdot 10^3$
V_{FO}	Threshold voltage		150			0.96	V
r_F	Forward slope resistance		150			0.12	mΩ
V_{FM}	Peak forward voltage	$I_{FM}=5000A$, $F=35kN$	25			2.20	V
I_{rm}	Reverse recovery current	$I_{FM}=2000A$, $t_p=4000\mu s$, $di/dt=-60A/\mu s$, $V_R=100V$	150		350		A
t_{rr}	Reverse recovery time				12		μs
Q_{rr}	Recovery charge				4300		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	Double side cooled Clamping force 40kN				0.007	$^{\circ}C/W$
$R_{th(c-h)}$	Thermal resistance case to heat sink					0.002	
F_m	Mounting force			63		84	kN
T_{vj}	Junction temperature			-40		150	$^{\circ}C$
T_{stg}	Stored temperature			-40		160	$^{\circ}C$
W_t	Weight				1390		g
Outline	ZT84cT						

Outline:

TECHSEM reserves the right to change specifications without notice.