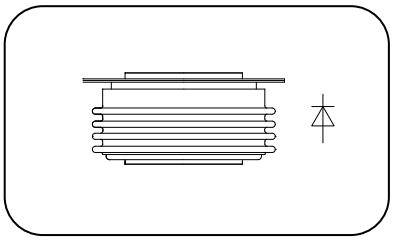
TECHSEM

Y50ZKG
FAST RECOVERY DIODE

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

$I_{F(AV)}$	**1060A**
V_{RRM}	**4000~5000V**
t_{rr}	**9.0μs**



SYMBOL	CHARACTERISTIC	TEST CONDITIONS		T_j(°C)	VALUE			UNIT
					Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled,	T_C=55°C	150			1375	A
			T_C=85°C				1060	
V_{RRM}	Repetitive peak reverse voltage	V_{RRM} tp=10ms V_{RSM}= V_{RRM}+100V		150	4000		5000	V
I_{RRM}	Repetitive peak current	V_{RM}= V_{RRM}		150			100	mA
I_{FSM}	Surge forward current	10ms half sine wave V_R=0.6V_{RRM}		150			15	kA
I^2t	I^2T for fusing coordination						1125	A^2s*10^3
V_{FO}	Threshold voltage			150			1.73	V
r_F	Forward slop resistance						0.51	mΩ
V_{FM}	Peak on-state voltage	I_{TM}=1500A, F=24kN		25			2.50	V
I_{rm}	Reverse recovery current	I_{TM}=2000A,tp=1000μs, -di/dt=60A/μs, V_R=50V		100		330		A
t_{rr}	Reverse recovery time					9		μs
Q_{rr}	Recovery charge					1500	1800	μC
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180^0 sine double side cooled Clamping force 24kN					0.020	°C /W
$R_{th(c-h)}$	Thermal resistance case to heat sink						0.005	
F_m	Mounting force				19		26	kN
T_{stg}	Stored temperature				-40		160	°C
W_t	Weight					440		g
Outline	**ZT50cT**							

Outline