TECHSEM

Y38ZKB

FAST RECOVERY DIODE

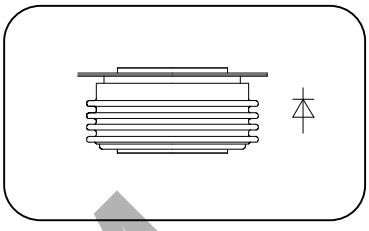
Features

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

Typical Applications

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

$I_{F(AV)}$	**1291A**
V_{RRM}	**200~1000V**
t_{rr}	**3.0μs**



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_{hs}=55°C	150			1291	A
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled, T_{hs}=102°C	150			800	A
V_{RRM}	Repetitive peak reverse voltage	V_{RRM} tp=10ms V_{RSM}= V_{RRM}+100V	150	200		1000	V
I_{RRM}	Repetitive peak current	V_{RM}= V_{RRM}	150			40	mA
I_{FSM}	Surge forward current	10ms half sine wave V_R=0.6V_{RRM}	150			10	KA
I^2t	I^2T for fusing coordination					500	A^2s*10^3
V_{FO}	Threshold voltage		150			1.15	V
r_F	Forward slop resistance					0.34	m
V_{FM}	Peak on-state voltage	I_{TM}=2400A, F=15KN	25			2.8	V
I_{rm}	Reverse recovery current	I_{TM}=800A,tp=1000μs, -di/dt=20A/μs, V_R=50V	100		51		A
t_{rr}	Reverse recovery time				3		μs
Q_{rr}	Recovery charge				77	90	μC
$R_{th(j-h)}$	Thermal resistance Junction to heatsink	At 180^0 sine double side cooled Clamping force15KN				0.033	°C /W
F_m	Mounting force			10		20	KN
T_{stg}	Stored temperature			-40		160	°C
W_t	Weight				270		g
Outline	ZT33cT						

Outline