

### 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

$I_{F(AV)}$       **720A**  
 $V_{RRM}$         **2100~3000V**  
 $t_{rr}$             **4.0 $\mu$ s**



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>j</sub> (°C)	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled, T <sub>C</sub> =85°C	150			720	A
$V_{RRM}$	Repetitive peak reverse voltage	tp=10ms	150	2100		3000	V
$I_{RRM}$	Repetitive peak current	at V <sub>RRM</sub>	150			50	mA
$I_{FSM}$	Surge forward current	10ms half sine wave	150			10	kA
$I^2t$	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>				500	A <sup>2</sup> s*10 <sup>3</sup>
$V_{FO}$	Threshold voltage		150			1.78	V
$r_F$	Forward slope resistance					0.45	mΩ
$V_{FM}$	Peak forward voltage	I <sub>TM</sub> =1000A, F=15kN	25			2.90	V
$I_{rm}$	Reverse recovery current	I <sub>TM</sub> =1000A, tp=1000 $\mu$ s, -di/dt=60A/ $\mu$ s, V <sub>R</sub> =50V	150		80		A
$t_{rr}$	Reverse recovery time				4		$\mu$ s
$Q_{rr}$	Recovery charge				120	150	$\mu$ C
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 15kN				0.035	°C/W
$R_{th(c-h)}$	Thermal resistance case to heat sink					0.008	
$F_m$	Mounting force			10		20	kN
$T_{stg}$	Stored temperature			-40		160	°C
$W_t$	Weight				250		g
Outline	ZT33cT						

### Outline

