

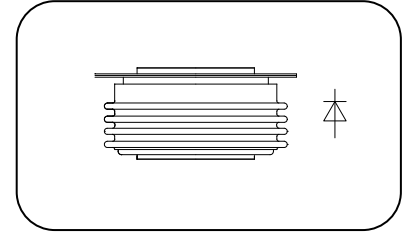
Features

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

Typical Applications

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

$I_{F(AV)}$ **538A**
 V_{RRM} **4000~5000V**
 t_{rr} **6.0 μ s**



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,	$T_c=55^{\circ}C$	150			695	A
			$T_c=85^{\circ}C$				538	
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			50	mA	
I_{FSM}	Surge forward current	10ms half sine wave	150			7.5	kA	
I^2t	I^2T for fusing coordination	$V_R=0.6V_{RRM}$				281	$A^2s \cdot 10^3$	
V_{FO}	Threshold voltage		150			1.89	V	
r_F	Forward slop resistance					1.18	m Ω	
V_{FM}	Peak on-state voltage	$I_{TM}=1000A$, $F=15kN$	150			3.07	V	
I_{rm}	Reverse recovery current	$I_{TM}=1000A$, tp=1000 μ s, -di/dt=60A/ μ s, $V_R=50V$	150		240		A	
t_{rr}	Reverse recovery time				6		μ s	
Q_{rr}	Recovery charge				720	900	μ C	
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 15kN				0.035	$^{\circ}C/W$	
$R_{th(c-h)}$	Thermal resistance case to heat sink					0.008		
F_m	Mounting force			10		20	kN	
T_{stg}	Stored temperature			-40		160	$^{\circ}C$	
W_t	Weight				250		g	
Outline	ZT33cT							

Outline

