

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} **10.0 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, $T_c=85^{\circ}C$				538	A
V_{RRM}	Repetitive peak reverse voltage	$t_p=10ms$	150	4000		5000	V
I_{RRM}	Repetitive peak current	at 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
V_{FO}	Threshold voltage		150			1.89	V
r_F	Forward slope resistance						1.18
V_{FM}	Peak forward voltage	$I_{TM}=1000A, F=15kN$	25			3.80	V
I_{rm}	Reverse recovery current	$I_{TM}=1000A, t_p=1000\mu s,$ $-di/dt=60A/\mu s,$ $V_R=50V$	150		240		A
t_{rr}	Reverse recovery time				10		μs
Q_{rr}	Recovery charge				720	900	μC
$R_{th(j-c)}$	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

