

HIGH POWER WELDING DIODES
YZPST-65N06
Absolute Maximum Ratings

	VOLTAGE RATINGS	MAXIMUM LIMITS	UNITS
V_{RRM}	Repetitive peak reverse voltage, $T_j=170^\circ\text{C}$	600	V
V_{RSM}	Non-repetitive peak reverse voltage, $T_j=170^\circ\text{C}$	650	V
	OTHER RATINGS	MAXIMUM LIMITS	UNITS
$I_{F(AVM)}$	Maximum average forward current, $T_j=85^\circ\text{C}$	16000	A
$I_{F(RMS)}$	Nominal RMS forward current, $T_j=85^\circ\text{C}$	23247	A
I_{FSM}	Peak non-repetitive surge $t_p=10\text{ms}$, $T_j=170^\circ\text{C}$	90	kA
I^2t	I^2t capacity for fusing $t_p=10\text{ms}$, $T_j=170^\circ\text{C}$	3.8E+07	A ² s
T_{jop}	Operating temperature range	-40 to +170	$^\circ\text{C}$
T_{stg}	Storage temperature range	-40 to +170	$^\circ\text{C}$

Characteristics

	PARAMETER	MIN.	TYP.	MAX.	TEST CONDITIONS	UNITS
V_{FM}	Maximum peak forward, $T_j=170^\circ\text{C}$	-	-	0.91	$I_{FM}=6000\text{A}$	V
$V_{(TO)}$	Threshold voltage $T_j=170^\circ\text{C}$	-	-	0.72		V
r_T	Slope resistance $T_j=170^\circ\text{C}$	-	-	0.017		m Ω
I_{RRM}	Peak reverse current	-	-	50	Rated V_{RRM} , $T_j=170^\circ\text{C}$	mA
				10	Rated V_{RRM} , $T_j=25^\circ\text{C}$	
Q_{rr}	Recovered charge	-	-	600	$I_F=1000\text{A}$, $di/dt=-30\text{A}/\mu\text{s}$ $V_r=100\text{V}$	μC
I_{rm}	Reverse recovery current	-	-	-	$V_r=50\text{V}$, 50% Chord.	A
t_{rr}	Reverse recovery time, 50% Chord	-	-	-	$I_{FM}=400\text{A}$ $di_r/dt = 25 \text{ A}/\mu\text{s}$	μs
R_{thJK}	Thermal resistance, junction to case	-	-	3.8	Double side cooled	K/KW
					Single side cooled	
F	Mounting force	35		70		kN
W_t	Weight	-	170	-		g

Outline Drawing

