

## Feature

- Hermetic ceramics-metal stud structure
- Conform to national standard JB/T8949.2-1998
- Capacity of supporting high surge current
- Stud cathode and strd anode version

## Typical Application

- DC motor controls Controls DC power supplie
- AC switch and thermal control Synchronous motor exditation

$I_{F(AV)}$	20A
$V_{RRM}$	100-5000V
$I_{FSM}$	8.25 KA
$I^2t$	580 A <sup>2</sup> s

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>J</sub> (°C)	VALUE		UNIT
				Min	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave, 50HZ Single heat sink, T <sub>C</sub> =98°C	150		20	A
$I_{F(RMS)}$	RMS current		150		55	A
$V_{RRM}$	Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM} t_p = 10ms$ $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 200V$	150	100	5000	V
$I_{RRM}$	Repetitive peak current	$V_{RM} = V_{RRM}$	150		12	mA
$I_{FSM}$	Surge on-state current	10ms half sine wave	150		8.25	KA
$I^2t$	$I^2t$ for fusing	$V_R = 0.6V_{RRM}$			580	A <sup>2</sup> s
$V_{TO}$	Threshold voltage		150		0.76	V
$r_T$	On-state slop resistance				3.8	mΩ
$V_{FM}$	Peak on-state voltage	$I_{TM} = 30A, F = 9.0KN$	150		1.3	V
$I_{rm}$	Reverse recovery	$I_{TM} = 30A, t_q = 1000us$ $Di/dt = -20A/us.$ $V_r = 50V$	150		70	A
$t_{rr}$	Reverse recovery time				4.0	us
$Q_{rr}$	Recovered charge				140	uC
$R_{th(j-h)}$	Thermal impedance node to the shell	180 ° sine wave, single heat sink			0.090	°C/W
$F_M$	Mounting force				37	N
$T_{stq}$	Stored temperature			-65	200	°C
$W_t$	Weight			27		g
Outline						

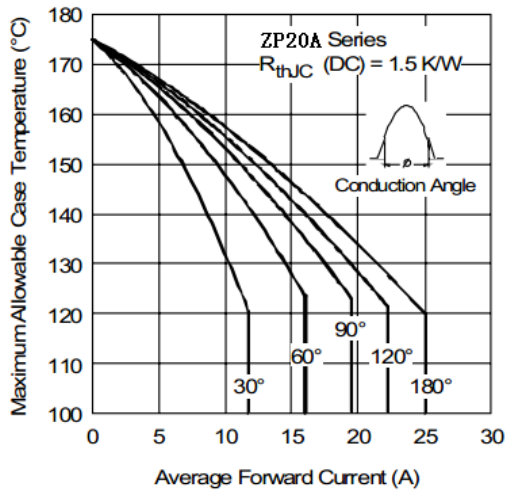


Fig. 1 - Current Ratings Characteristics

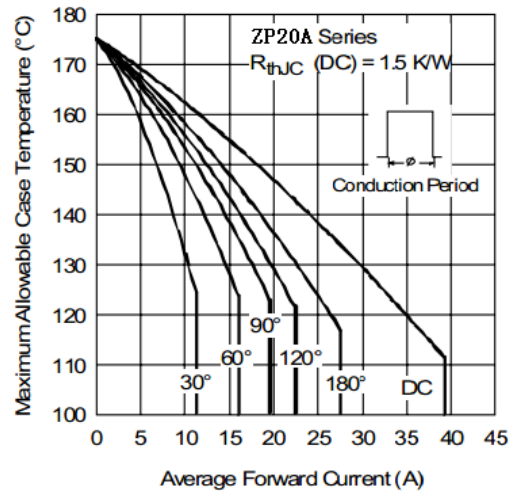


Fig. 2 - Current Ratings Characteristics

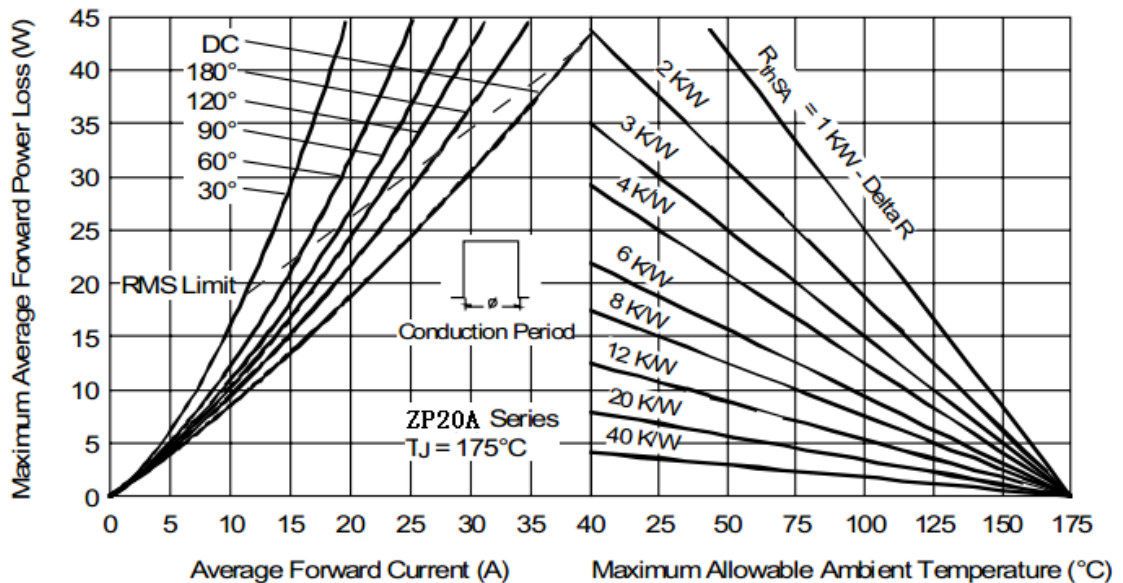
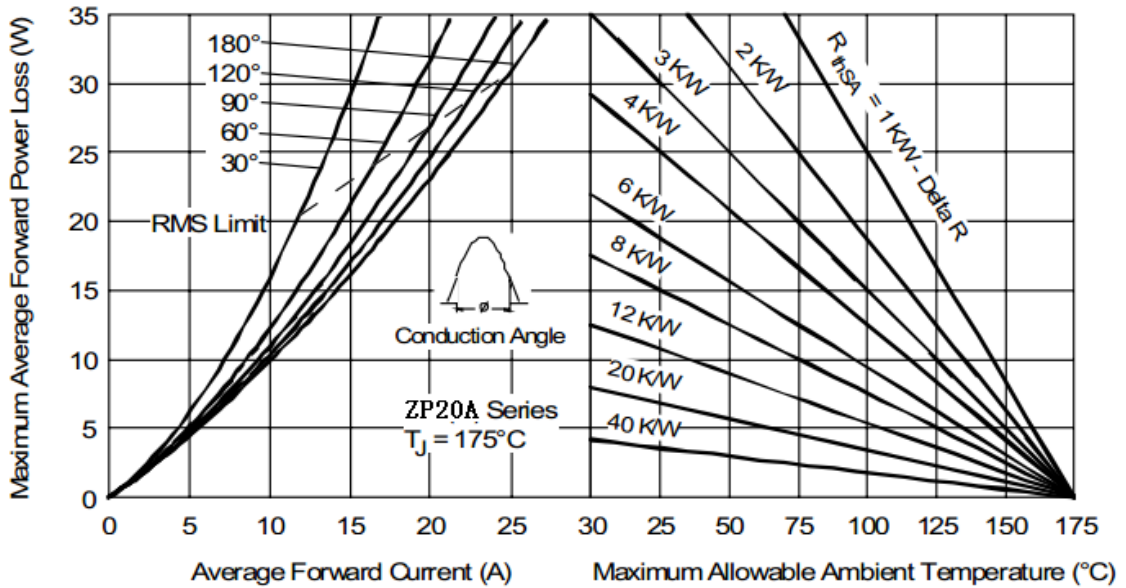


Fig. 4 - Forward Power Loss Characteristics

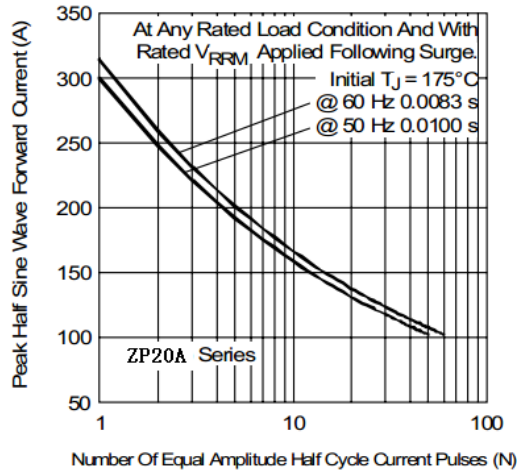


Fig. 5 - Maximum Non-Repetitive Surge Current

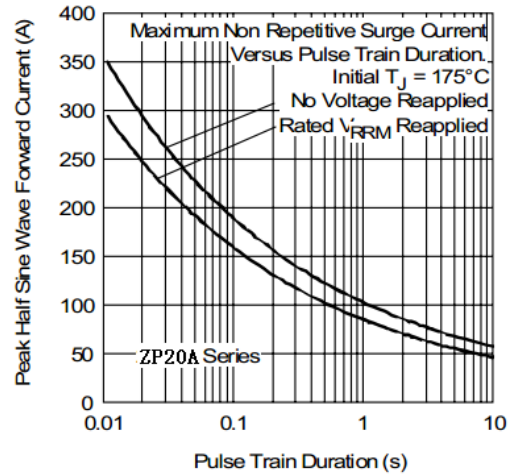


Fig. 6 - Maximum Non-Repetitive Surge Current

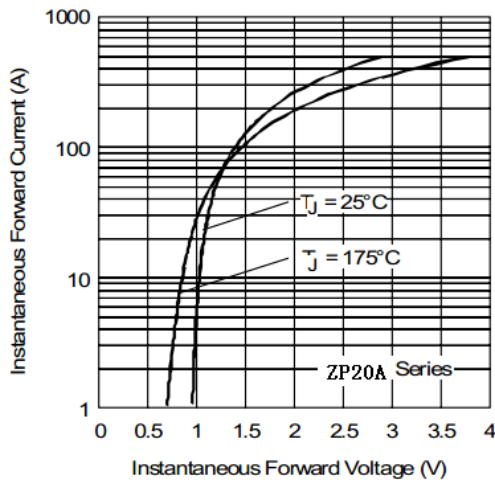


Fig. 7 - Forward Voltage Drop Characteristics

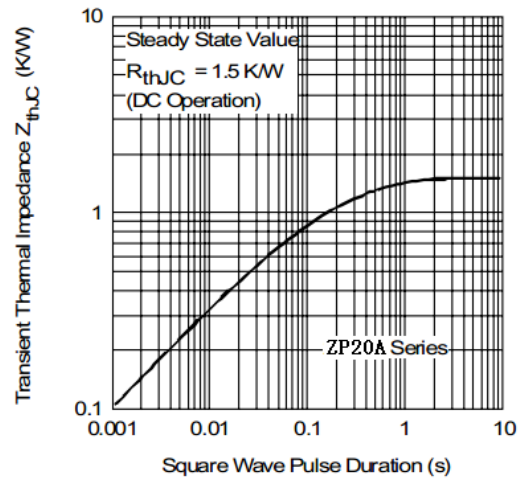
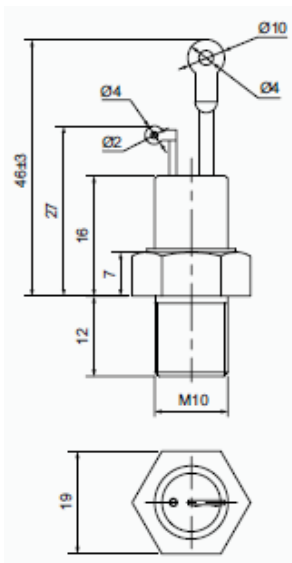
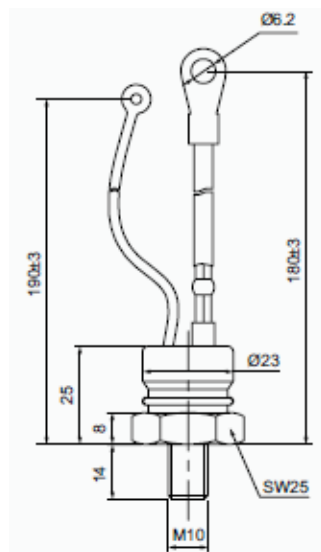


Fig. 8 - Thermal Impedance  $Z_{thJC}$  Characteristics

### Outline:



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