

Features

- Optimized for high current rectifiers

- Very low threshold voltage and slop resistance

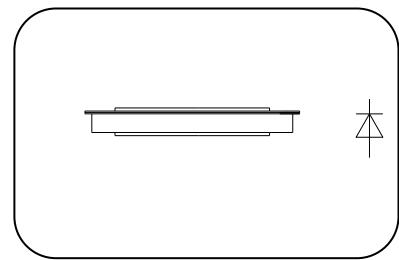
- Very low thermal resistance

Typical Applications

- High current application For Welders up to

- 10000Hz

- Electrode plating

 $I_{F(AV)}$ **5000 A** **V_{RRM}** **200~400 V** **I_{FSM}** **45 kA** **I^2t** **10000 $10^3 A^2s$** 

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, $T_c=100^{\circ}C$	175			5000	A
V_{RRM}	Repetitive peak reverse voltage	$t_p=10ms$	175	200		400	V
I_{RRM}	Repetitive peak current	at V_{RRM}	175			50	mA
I_{FSM}	Surge forward current	10ms half sine wave $V_R=0V_{RRM}$	175			45	kA
I^2t	I^2t for fusing coordination					10000	$10^3 A^2s$
V_{FO}	Threshold voltage	$I_F=5000-15000A$	175			0.82	V
r_F	Forward slope resistance					0.032	$m\Omega$
V_{FM}	Min Peak on-state voltage	$I_{FM}=5000A, F=30kN$	25			1.10	V
I_{rr}	Recovery current	$I_{FM}=1000A, t_p=2000\mu s, dI/dt=-20A/\mu s, V_R=50V$	175			40	A
trr	Recovery time					3.0	μs
Q_{rr}	Recovery charge					100	μC
$R_{th(j-c)}$	Thermal resistance Junction to case	Double side cooled Clamping force 30.0kN				0.010	$^{\circ}C/W$
$R_{th(c-h)}$	Thermal resistance case to heat sink					0.005	
F_m	Mounting force			20		40	kN
T_{stg}	Stored temperature			-40		175	$^{\circ}C$
W_t	Weight				140		g
Outline		P56					

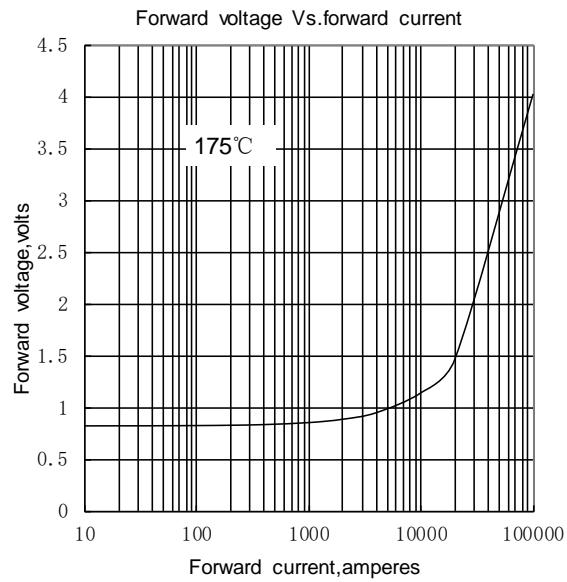


Fig.1

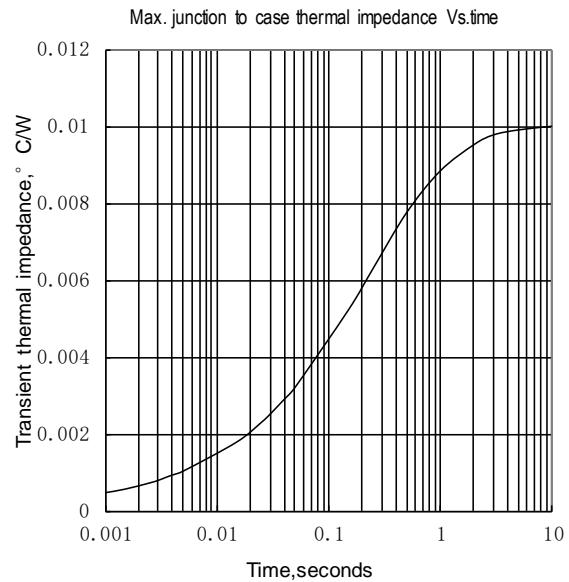


Fig.2

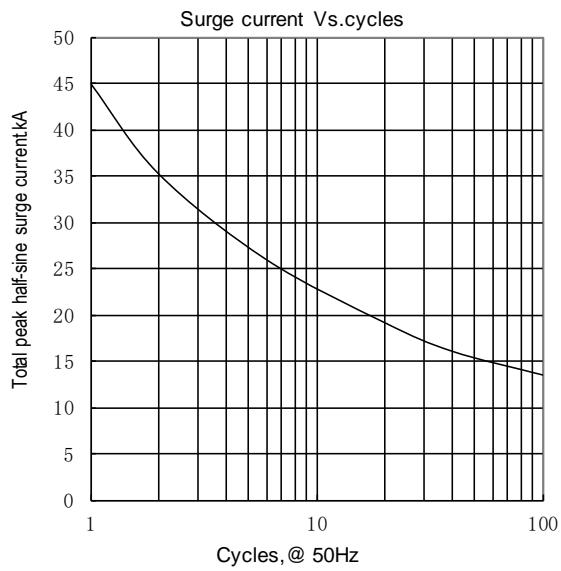


Fig.3

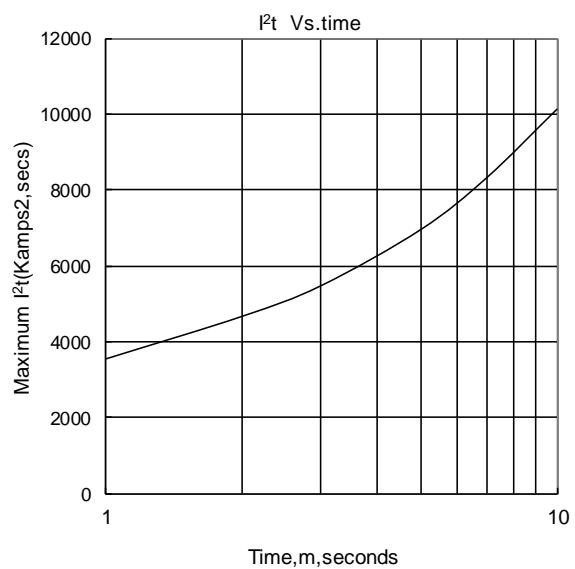


Fig.4

