

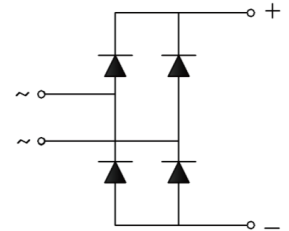
Feature

- Glass-passivated chip ensures high stability
- Low forward voltage drop
- Isolation voltage 2000V ~
- Small volume, light weight
- Low thermal resistance, high heat-conductivity, low temperature rise

Application

- Power supply for DC power device
- Input rectifier for PWM converter
- Inverter welding machine

Maximum value



Symbol	Parameter	Rating			Unit
		36MB120	36MB140	36MB160	
V_{RRM}	Reverse peak repetitive voltage	1200	1400	1600	V
V_{RSM}	Reverse peak non-repetitive voltage	1300	1500	1700	V

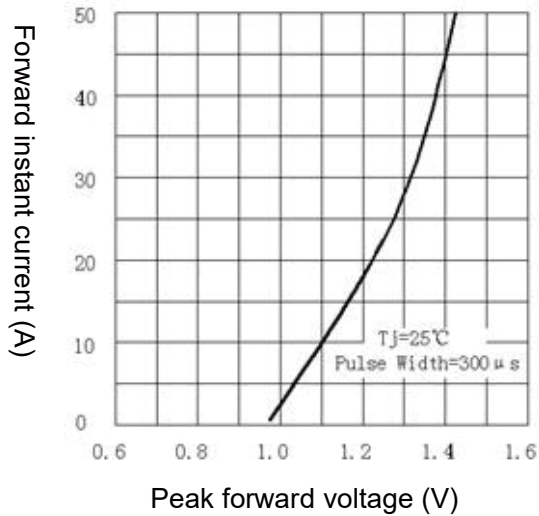
Symbol	Parameter	Test condition	Rating	Unit
$I_{F(AV)}$	Forward average current	$T_C=78^{\circ}\text{C}$	35	A
I_{FSM}	Forward surge current	sine wave 50Hz, $t=10\text{ms}$, $T_j=25^{\circ}\text{C}$	475	A
I^2t	I^2t value		800	A^2S
Viso	Isolation voltage	50Hz, R.M.S, $t=1\text{min}$, $I_{iso}=1\text{mA}(\text{max})$	2000	V
T_j	Operating junction temperature		-40 to +125	$^{\circ}\text{C}$
T_{jm}	Rated junction temperature		150	$^{\circ}\text{C}$
T_{stg}	Storage temperature		-40 to 125	$^{\circ}\text{C}$
Md	Mounting torque M5		2	$\text{N}\cdot\text{m}$
Wt	Weight		18	g

Electrical characteristics

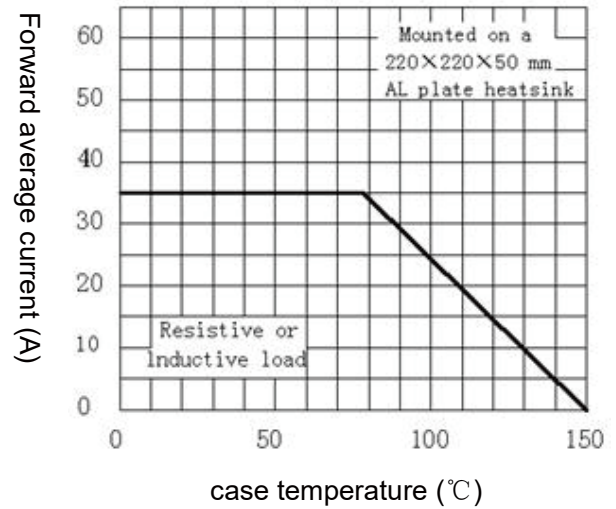
Symbol	Parameter	Test condition	Max value	Unit
I_{RRM}	Peak reverse repetitive current	$V_R=V_{RRM}$, $T_j=25^{\circ}\text{C}$	5	μA
		$V_R=V_{RRM}$, $T_j=150^{\circ}\text{C}$	3	mA
V_{FM}	Peak forward voltage	$I_{FM}=17.5\text{A}$, $T_j=25^{\circ}\text{C}$	1.18	V
$R_{th(j-c)}$	Thermal impedance (junction-case)	Single-sided heat dissipation	1.4	$^{\circ}\text{C}/\text{W}$

Performance Curves

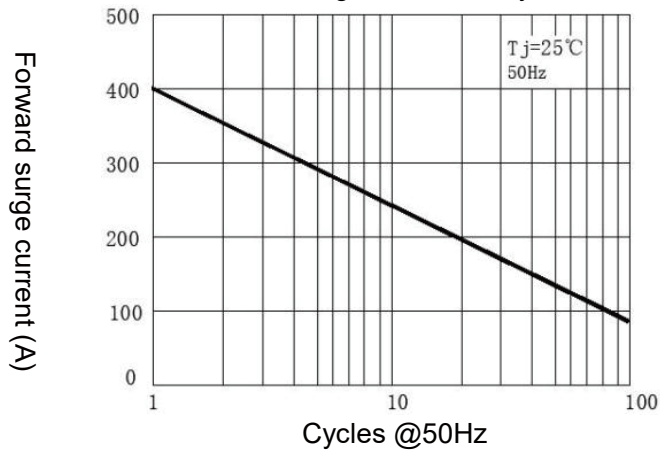
Forward characteristics curve



Case temperature vs forward average current



Forward surge current vs cycles



Outline

