

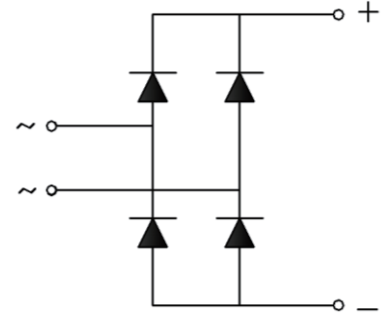
36MB120 thru 36MB160

### 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	
VRRM	Reverse peak repetitive voltage	1200	1400	1600	V
VRSM	Reverse peak non-repetitive voltage	1300	1500	1700	V

Symbol	Parameter	Test condition	Rating	Unit
I <sub>F(AV)</sub>	Forward average current	TC=78°C	35	A
I <sub>FSM</sub>	Forward surge current	sine wave 50Hz, t=10ms, T <sub>j</sub> =25°C	475	A
I <sup>2</sup> t	I <sup>2</sup> t value		800	A <sup>2</sup> S
Viso	Isolation voltage	50Hz, R.M.S, t=1min, I <sub>iso</sub> : 1mA(max)	2000	V
T <sub>j</sub>	Operating junction temperature		-40 to +125	°C
T <sub>jm</sub>	Rated junction temperature		150	°C
T <sub>stg</sub>	Storage temperature		-40 to 125	°C
Md	Mounting torque M5		2	N•m
Wt	Weight		18	g

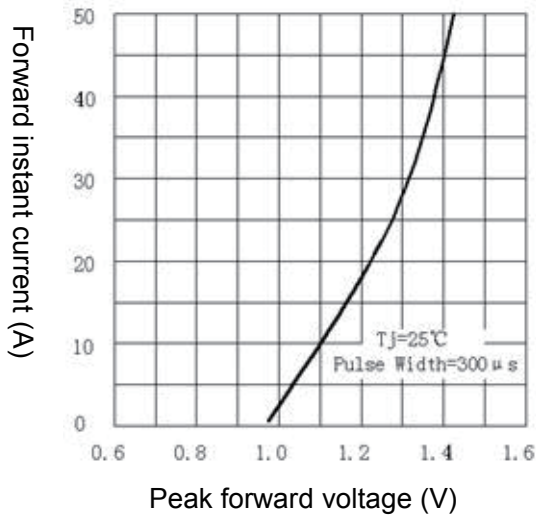
### Electrical characteristics

Symbol	Parameter	Test condition	Max value	Unit
I <sub>RRM</sub>	Peak reverse repetitive current	V <sub>R</sub> =V <sub>RRM</sub> , T <sub>j</sub> =25°C	5	μA
		V <sub>R</sub> =V <sub>RRM</sub> , T <sub>j</sub> =150°C	3	mA
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> = 17.5A, T <sub>j</sub> =25°C	1.18	V
R <sub>th(j-c)</sub>	Thermal impedance (junction-case)	Single-sided heat dissipation	1.4	°C/W

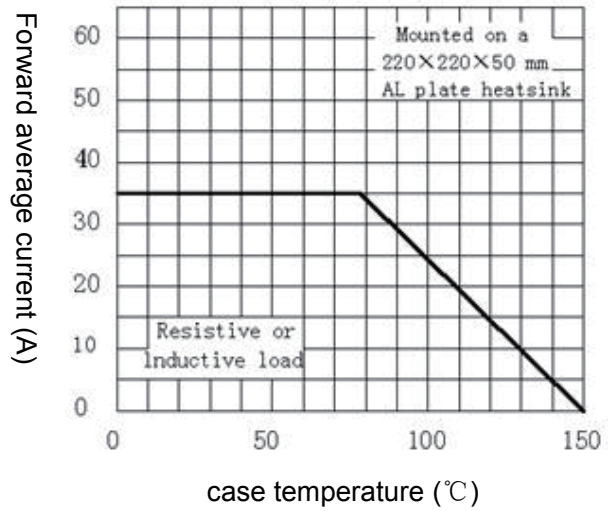
36MB120 thru 36MB160

### Performance Curves

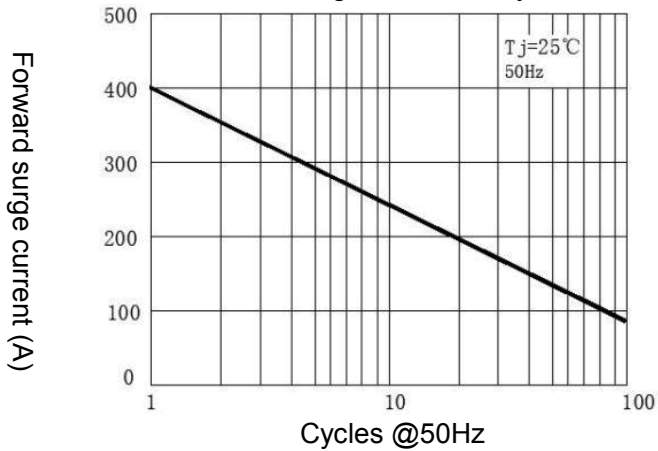
Forward characteristics curve



Case temperature vs forward average current



Forward surge current vs cycles



### Outline

