



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



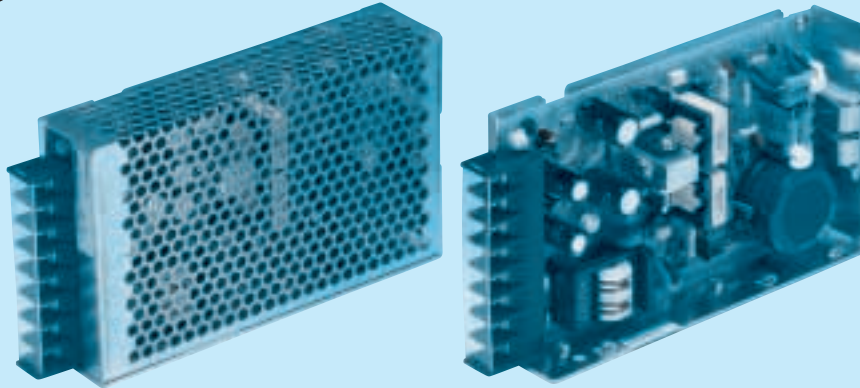
MMB50A

MMB 50A -1 -□

① ② ③ ④

c  us
RoHS

MMB



- ① Series name
- ② Output wattage
- ③ Output voltage combination
- ④ Optional *1
C :with Coating
J :Connector type
N :with Cover

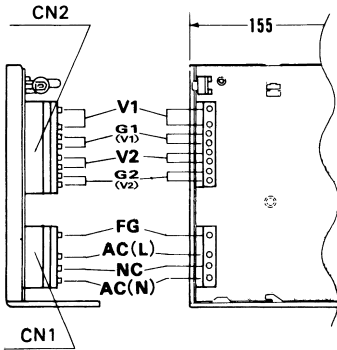
MODEL		MMB50A-1	MMB50A-2	MMB50A-3	MMB50A-4	MMB50A-5	MMB50A-6
DC OUTPUT	V1	+5V 3.0A	+5V 5.0A	+5V 3.0A	+12V 2.1A	+12V 3.0A	+15V 1.7A
	V2	+12V 3.0(Peak 3.6)A	+12V 2.1A	+24V 1.5(Peak 1.8)A	+12V 2.1A	+12V 1.5A	+15V 1.7A

SPECIFICATIONS

	MODEL	MMB50A-1	MMB50A-2	MMB50A-3	MMB50A-4	MMB50A-5	MMB50A-6							
INPUT	VOLTAGE[V]	AC85 - 132 1 φ or DC110 - 170												
	CURRENT[A]	ACIN 100V	1.4typ (Io=100%)											
	FREQUENCY[Hz]	47 - 440 or DC												
	EFFICIENCY[%]	75typ		72typ		75typ		76typ		76typ		76typ		
	INRUSH CURRENT[A]	ACIN 100V	20typ (Io=100%) (At cold start)											
OUTPUT	VOLTAGE[V]	+5	+12	+5	+12	+5	+24	+12	+12	+12	+12	+15	+15	
	CURRENT[A]	3	3 (Peak3.6)	5	2.1	3	1.5 (Peak1.8)	2.1	2.1	3	1.5	1.7	1.7	
	MINIMUM CURRENT[A]	0	0	0	0	0	0	0	0	0	0	0	0	
	LINE REGULATION[mV]	20max	48max	20max	48max	20max	96max	48max	48max	48max	48max	60max	60max	
	LOAD REGULATION[mV]	40max	100max	40max	100max	40max	150max	100max	100max	100max	100max	120max	120max	
	RIPPLE[mVp-p]	0 to +50°C	80max	120max	80max	120max	80max	120max	120max	120max	120max	120max	120max	120max
		-10 - 0°C	140max	160max	140max	160max	140max	160max	160max	160max	160max	160max	160max	160max
	RIPPLE NOISE[mVp-p]	0 to +50°C	120max	150max	120max	150max	120max	150max	150max	150max	150max	150max	150max	150max
		-10 - 0°C	160max	180max	160max	180max	160max	180max	180max	180max	180max	180max	180max	180max
	TEMPERATURE REGULATION[mV]	0 to +50°C	50max	120max	50max	120max	50max	240max	120max	120max	120max	120max	150max	150max
START-UP TIME[ms]	100max (ACIN 85V, Io=100%)													
HOLD-UP TIME[ms]	15typ (ACIN 85V, Io=100%) 25typ (ACIN 100V, Io=100%)													
OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	4.5 - 5.5	Fixed	4.5 - 5.5	Fixed	4.5 - 5.5	Fixed	10.8 - 13.2	Fixed	10.8 - 13.2	Fixed	13.5 - 16.5	Fixed		
OUTPUT VOLTAGE SETTING[V]	—	11.64 - 12.36	—	11.64 - 12.36	—	23.28 - 24.72	—	11.64 - 12.36	—	11.64 - 12.36	—	14.55 - 15.45		
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works at over 105% of rating (V2 works at peak current) and recovers automatically												
	OVERVOLTAGE PROTECTION	Works at 115 - 140% of rating												
ISOLATION	INPUT-CASE, OUTPUT	AC2,000V 1minute, DC500V 50MΩmin (At Room Temperature)												
	OUTPUT-CASE	AC500V 1minute, DC500V 50MΩmin (At Room Temperature)												
	OUTPUT-OUTPUT(V1-V2)	AC100V 1minute, DC100V 50MΩmin (At Room Temperature)												
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	-10 to +65°C, 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max												
	STORAGE TEMP.,HUMID.AND ALTITUDE	-25 to +75°C, 20 - 95%RH (Non condensing), 9,000m (30,000feet) max												
	VIBRATION	10 - 55Hz, 19.6m/s ² (2G), 3minutes period, 30minutes each along X, Y and Z axis												
	IMPACT	196.1m/s ² (20G), 11ms, once each X, Y and Z axis												
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS	UL60950-1, C-UL Complies with DEN-AN												
	CONDUCTED NOISE	Complies with FCC-B												

*1 Please contact us about safety approvals for the model with option.
* Series/Parallel operation with other model is not possible.
* Derating is required when operated with case cover.

External view



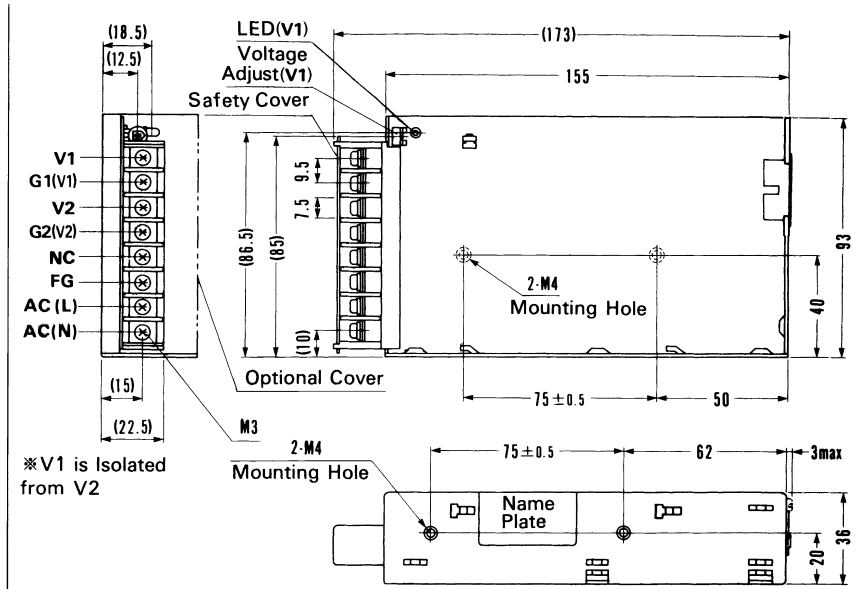
I/O Connector	Mating Connector
CN1	10-31-1048
CN2	09-65-2089

Terminal
Chain : 08-70-1031
Loose : 08-70-1030

(Mfr: Molex)

* Use J cover for connector type.

Connector type



* V1 is Isolated from V2

* Mounting torque : 1.2N·m (12.8kgf·cm) max

Barrier strip type

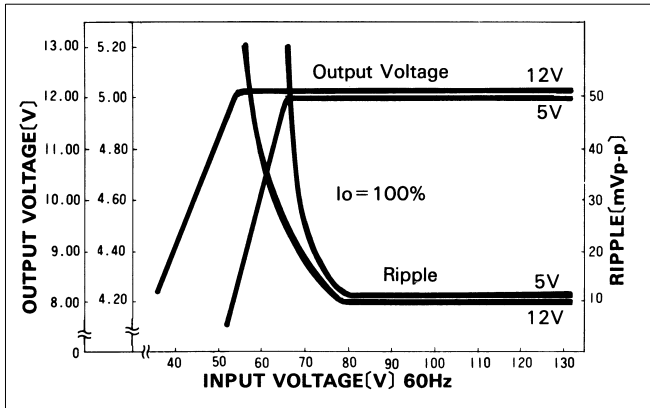
* Weight: 400g or less

* Cover is optional

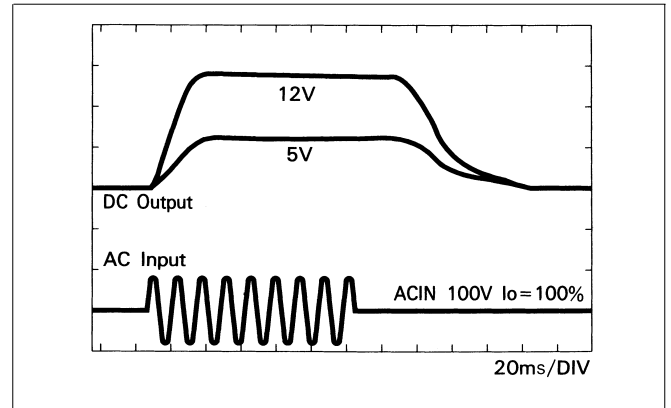
* Tolerance: ±1 * Dimensions in mm.

Performance data

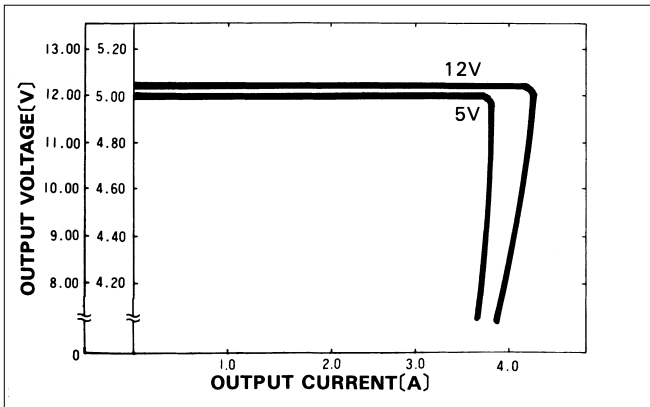
■ STATIC CHARACTERISTICS (MMB50A-1)



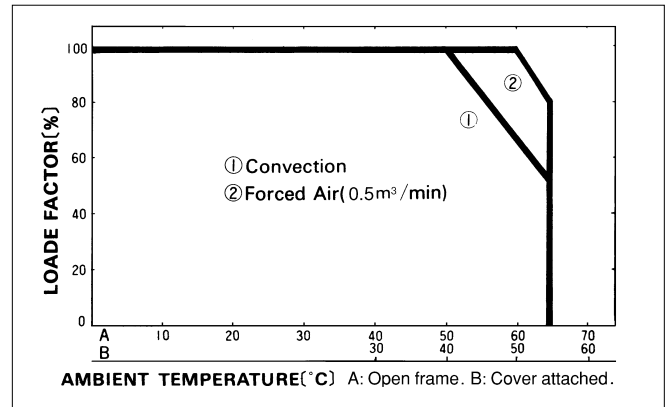
■ RISE TIME & FALL TIME (MMB50A-1)



■ OVERCURRENT CHARACTERISTICS (MMB50A-1)



■ DERATING CURVE



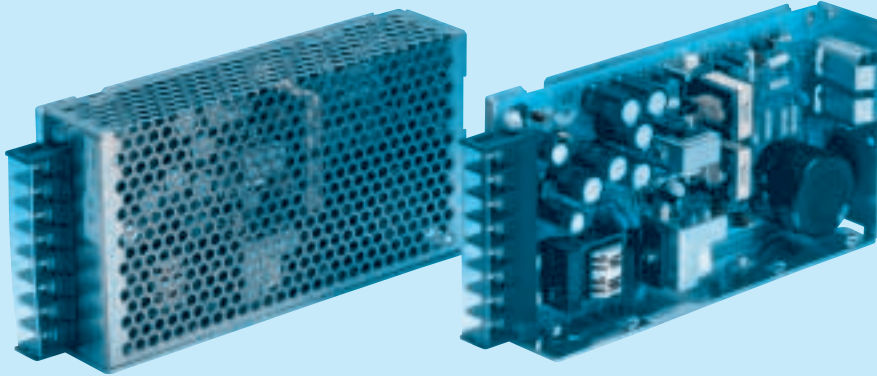
MMB75A

MMB 75A -1 -□

① ② ③ ④

c  us
RoHS

MMB



- ① Series name
- ② Output wattage
- ③ Output voltage combination
- ④ Optional *1
J : Connector type
N : with Cover

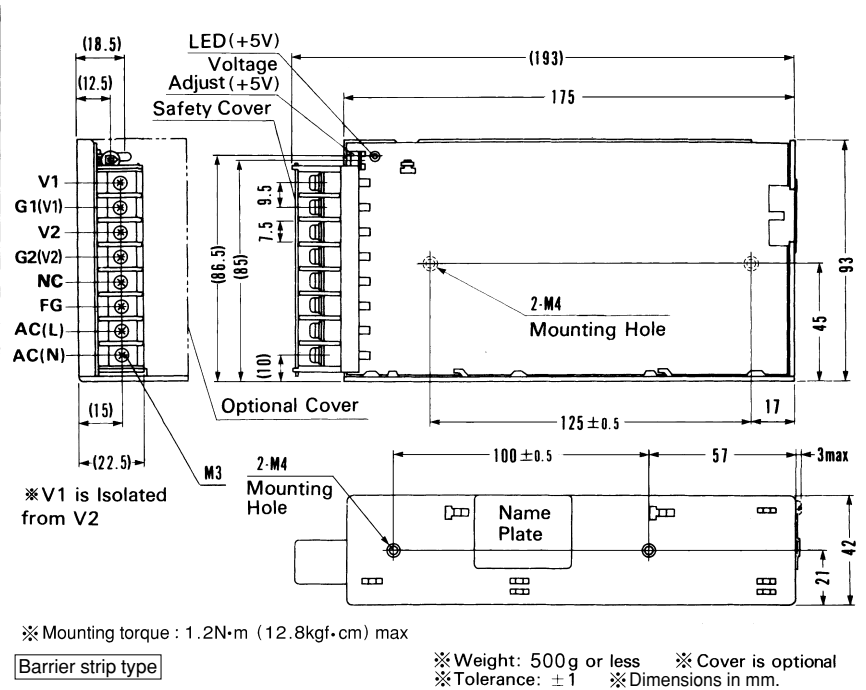
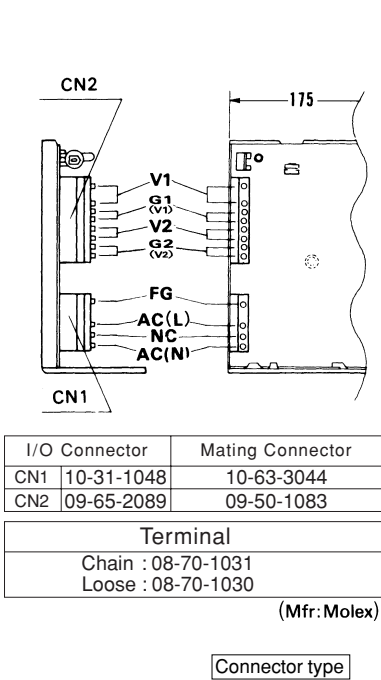
MODEL	MMB75A-1		MMB75A-2	
DC OUTPUT	V1	+5V 5.0A	+5V 6.0A	
	V2	+12V 4.0A	+24V 2.0A	

SPECIFICATIONS

	MODEL	MMB75A-1		MMB75A-2		
INPUT	VOLTAGE[V]	AC85 - 132 1 φ or DC110 - 170				
	CURRENT[A]	ACIN 100V	2.1typ (Io=100%)			
	FREQUENCY[Hz]	47 - 440 or DC				
	EFFICIENCY[%]	ACIN 100V	76typ (Io=100%)		78typ (Io=100%)	
	INRUSH CURRENT[A]	ACIN 100V	15typ (Io=100%)			
OUTPUT	VOLTAGE[V]	+5	+12	+5	+24	
	CURRENT[A]	5	4	6	2	
	MINIMUM CURRENT[A]	0	0	0	0	
	LINE REGULATION[mV]	20max	48max	20max	96max	
	LOAD REGULATION[mV]	40max	100max	40max	150max	
	RIPPLE[mVp-p]	0 to +50°C	80max	120max	80max	120max
		-10 - 0°C	140max	160max	140max	160max
	RIPPLE NOISE[mVp-p]	0 to +50°C	120max	150max	120max	150max
		-10 - 0°C	160max	180max	160max	180max
	TEMPERATURE REGULATION[mV]	0 to +50°C	50max	120max	50max	240max
START-UP TIME[ms]	200max (ACIN 85V, Io=100%)					
HOLD-UP TIME[ms]	15typ (ACIN 85V, Io=100%) 25typ (ACIN 100V, Io=100%)					
OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	4.5 - 5.5	Fixed		4.5 - 5.5	Fixed	
OUTPUT VOLTAGE SETTING[V]	—	11.64 - 12.36		—	23.28 - 24.72	
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically				
	OVERVOLTAGE PROTECTION	Works at 115 - 140% of rating				
ISOLATION	INPUT-CASE, OUTPUT	AC2,000V 1minute, DC500V 50MΩmin (At Room Temperature)				
	OUTPUT-CASE	AC500V 1minute, DC500V 50MΩmin (At Room Temperature)				
	OUTPUT-OUTPUT(V1-V2)	AC100V 1minute, DC100V 50MΩmin (At Room Temperature)				
ENVIRONMENT	OPERATING TEMP., HUMID. AND ALTITUDE	-10 to +65°C, 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max				
	STORAGE TEMP., HUMID. AND ALTITUDE	-25 to +75°C, 20 - 95%RH (Non condensing), 9,000m (30,000feet) max				
	VIBRATION	10 - 55Hz, 19.6m/s ² (2G), 3minutes period, 30minutes each along X, Y and Z axis				
	IMPACT	196.1m/s ² (20G), 11ms, once each X, Y and Z axis				
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS	UL60950-1, C-UL Complies with DEN-AN				
	CONDUCTED NOISE	Complies with FCC-B				

*1 Please contact us about safety approvals for the model with option.
* Series/Parallel operation with other model is not possible.
* Derating is required when operated with case cover.

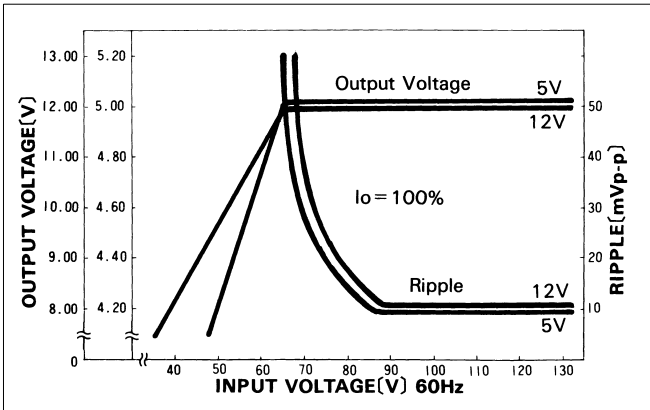
External view



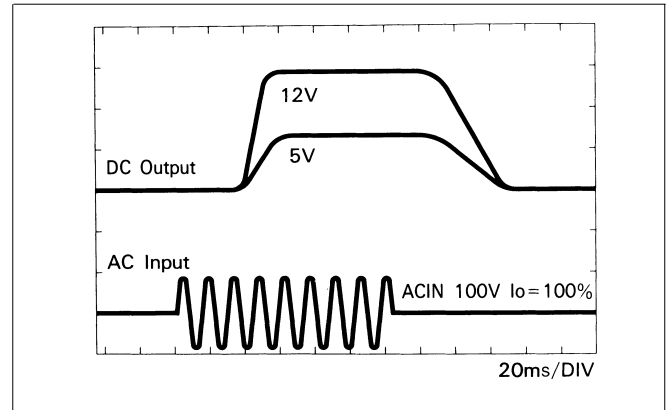
MMB

Performance data

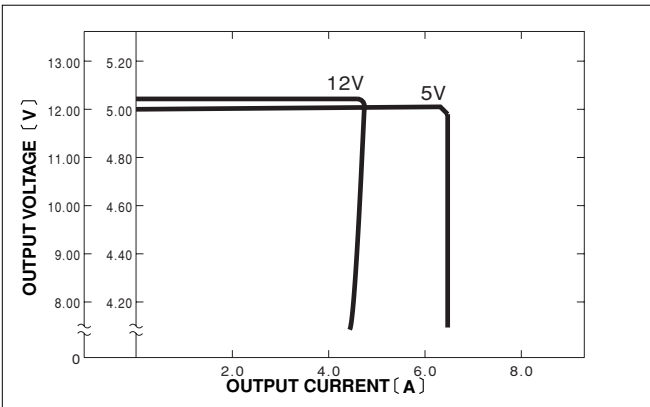
■ STATIC CHARACTERISTICS (MMB75A-1)



■ RISE TIME & FALL TIME (MMB75A-1)



■ OVERCURRENT CHARACTERISTICS (MMB75A-1)



■ DERATING CURVE

