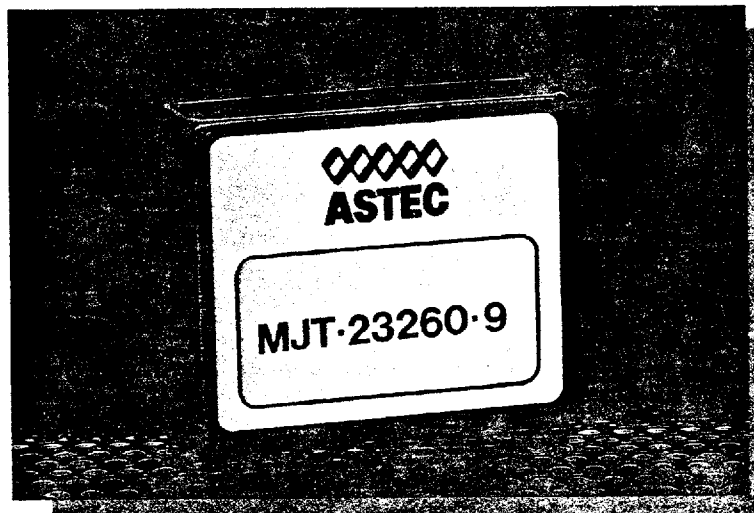




T-57-11

These units are ideally suited for telecommunications and applications having a widely varying input voltage, such as automotive test equipment, process control, minicomputers, and geosurvey equipment.



Special Features . . .

- 4:1 ultra wide input range
 9-36 Vdc
 20-72 Vdc
- Remote shutdown
- 100 kHz switching frequency
- Continuous short circuit protection
- Six-sided shielding

The 18-watt MJ series operates over an ultra wide input range of 9 to 36 Vdc or 20 to 72 Vdc. Efficiencies of 77% are typical over varying load conditions of 10% to 100%. Additional features include input reverse polarity protection, remote on/off control, logic compatible with CMOS or open collector TTL, short circuit protection with auto restart, overvoltage protection, and an operating temperature range of -25°C to +71°C with no derating. Units are packaged in a six-sided, continuous, shielded case for EMI/RFI protection and measure 2.5" x 3.0" x 0.83".

Electrical Specifications . . .

Input

Vin - nominal	24, 48
Voltage range	9-36 Vdc, 20-72 Vdc
Input filtering	LC
Reverse polarity protected	To nominal input current; external fuse required
Remote on/off control	All models

Output

Voltage tolerance	± 1% main output, ± 3% auxiliary
Ripple and noise	50 mV p-p (max)*
Short circuit protection	Power foldback, auto restart
Temperature coefficient	0.02% / °C max

General

Regulation:	Main	Aux.
Line	Nom to Hi ± .25%	± 1%
	Nom to Lo ± .25%	± 2%
Load	Min-Max ± .25%	± 3%
Efficiency	77% (typ)	
I/O isolation	500 Vdc - input to output	
Switching frequency	100 kHz	

Environmental . . .

Operating temperature range:
 -25°C to +71°C (no derating)

Storage temperature:
 -40°C to +105°C

Cooling:
 Free air convection

Notes . . .

* Measured with 3.3 µF 25 V tantalum capacitor across each output.

All specifications are typical at nominal line and full load at +25°C unless otherwise noted.

Specifications subject to change without notice.

DC/DC
 Converters
 18 Watts
 MJ Series



ASTECS STANDARD POWER
Division of Astec America Inc.
401 Jones Road
Oceanside, CA 92054-1216
Telephone: 619-757-1880
Facsimile: 619-439-4243

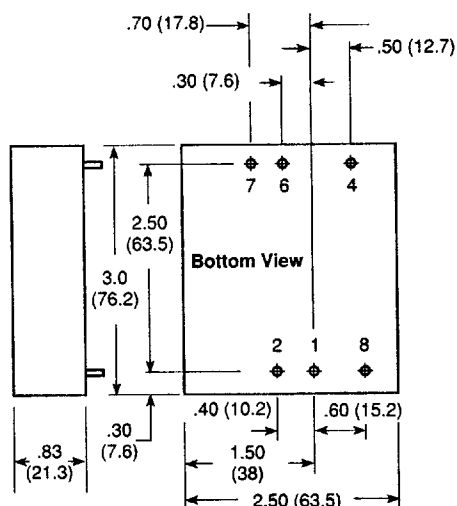
ASTECS STANDARD POWER EUROPE
A Division of Astec Europe Limited
Unit 2B, Carlisle Close, Sheffield Road
Chesterfield S41 9ED, UK
Telephone: 0246-455946
Facsimile: 0246-450428

Ordering Information

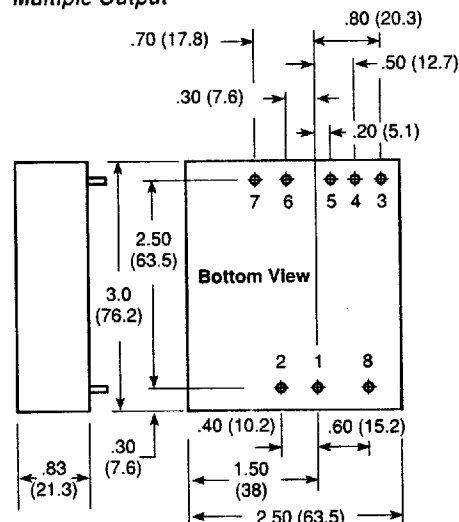
	Input Voltage	Output Voltage	Output Current	Model Number	SCI Equivalent Model Number	Regulation % Line ± Load ±	Case
Single	9 - 36 V 20 - 72 V	5 Vdc 5 Vdc	3500 mA 3500 mA	MJS2350-8	TA11-350-18	0.5	1
				MJS2350-9	TA11-350-48	0.5	1
	9 - 36 V 20 - 72 V	12 Vdc 12 Vdc	1500 mA 1500 mA	MJS3150-8	TA12-150-18	0.5	1
				MJS3150-9	TA12-150-48	0.5	1
	9 - 36 V 20 - 72 V	15 Vdc 15 Vdc	1200 mA 1200 mA	MJS4120-8	TA13-120-18	0.5	1
				MJS4120-9	TA13-120-48	0.5	1
Dual	9 - 36 V 20 - 72 V	±12 Vdc ±12 Vdc	750 mA 750 mA	MJD3150-8	TA22-150-18	0.5	2
				MJD3150-9	TA22-150-48	0.5	2
	9 - 36 V 20 - 72 V	±15 Vdc ±15 Vdc	600 mA 600 mA	MJD4120-8	TA23-120-18	0.5	2
				MJD4120-9	TA23-120-48	0.5	2
Triple	9 - 36 V 20 - 72 V	+5 / ±12 Vdc +5 / ±12 Vdc	2000 / ±310 mA 2000 / ±310 mA	MJT23260-8	TA34-260-18	0.5 / 3.0	2
				MJT23260-9	TA34-260-48	0.5 / 3.0	2
	9 - 36 V 20 - 72 V	+5 / ±15 Vdc +5 / ±15 Vdc	2000 / ±260 mA 2000 / ±260 mA	MJT24250-8	TA35-250-18	0.5 / 3.0	2
				MJT24250-9	TA35-250-48	0.5 / 3.0	2

Drawings

Single Output



Multiple Output



Pin Assignments

Single Output

Pin 1 +Input
 Pin 2 -Input
 Pin 3 N/C
 Pin 4 Output trim
 Pin 5 N/C
 Pin 6 +Output
 Pin 7 -Output
 Pin 8 Remote on/off

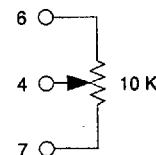
Multiple Output

Pin 1 +Vdc in
 Pin 2 -Vdc in
 Pin 3 +Vdc out
 Pin 4 Common out
 Pin 5 -Vdc out
 Pin 6 +5 Vdc out (triple only, N/C dual)
 Pin 7 Common out
 Pin 8 Remote on/off

Notes:

- Eight pins 0.040 (1.0) dia. x .020 (5.1) Lg Min.
- All dimensions are in inches and (mm).
- Load regulation from full load to minimum load with all other outputs at rated load.
- Minimum current of 200 mA required on 5 V out only.
- Maximum total power from all outputs is 18 watts, and no output is to exceed its maximum rated current.
- Shield connected to output common or -output.

- External output trimming: output may be externally trimmed ± 10% (single output only).



- Remote on/off control (pin 8) referenced to input minus (pin 2).
 On - greater than 2.0 Vdc or open circuit.
 Off - less than 1.6 Vdc or short circuit.