

SSRMP SERIES

POTTER & BRUMFIELD “MINI PUCK” SOLID STATE RELAY

TE Connectivity (TE's) Potter & Brumfield Solid-state relay (SSR) minipuck, SSRMP is a compact sized panel mountable type product series. It handles various load options ranging from 10Amp to 25Amp @ 240/480Vac.

FEATURES

- Standard “mini puck” package
- LED indicator
- Triac outputs
- 10A, 16A & 25A rms versions
- DC input version
- 240 & 480 Vac Line voltage
- 4000V rms isolation
- Quick connect style terminals
- Panel mountable

APPLICATIONS

- Industrial control
- Automation
- Robot
- Lighting
- HVAC
- Commercial appliances
- Injection machine
- Packaging machine



APPROVALS

- UL : File E29244
- CE & UK CA : N84_00006



Users should thoroughly review the technical data before selecting a product part number. It is recommended that users also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

POTTER & BRUMFIELD

“Mini Puck” Solid State Relay

ENGINEERING DATA

Form	1 Form A (SPST-NO)
Duty	Continuous
Isolation	4000V _{rms} minimum, input - output
Temperature Range	
Storage	-30°C to +100°C
Operating Temperature	-30°C to + 80°C
Case Material	Plastic, UL rated 94V-1
Case and Mounting	Refer to outline dimension
Termination	Refer to outline dimension
Approximate Weight	0.65 oz. (18.3g).

INPUT SPECIFICATIONS

Parameter	Units	DC INPUT
Control Voltage Range VIN	VDC	4 - 32
Must Operate Voltage VIN(OP) (Min.)	VDC	4
Must release Voltage VIN(REL) (Min.)	VDC	1
Input Current (Max.)	mA	1 - 20

OUTPUT SPECIFICATION (@ 25°C, UNLESS OTHERWISE SPECIFIED)

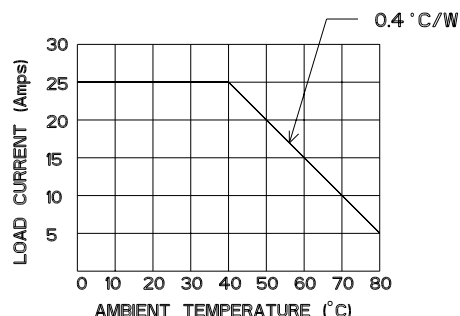
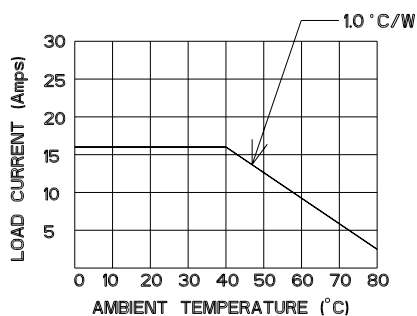
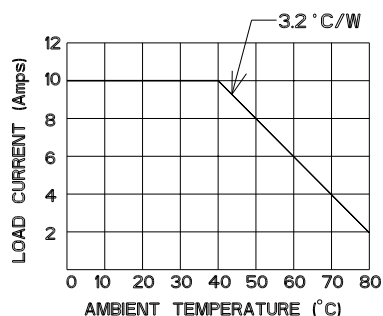
Parameter	Nom. Line Voltage	Conditions	Units	10A Models	16A Models	25A Models
Load Voltage Range V _L	240		Vrms	24-280		
	480		Vrms	48-480		
Load Current Range I _L *			A	10	16	25
Single Cycle Surge Current	240 & 480	Resistive	A	100	160	208
Leakage Current (Off-State) (@rated voltage)			mA	5		
On-State Voltage Drop (@rated current)		f=60Hz. V _L =Nom	Vrms	1.6		
Static dv/dt (Off-State) (Min.)		IL = Max.	V/μs	400		475
Repetitive Peak Off-State Voltage	240		Vrms	600		
	480			800		
I ² T Rating	240 & 480		A ² Sec	55	144	259
Zero Turn-On Voltage			Vpk	15		
Thermal Resistance, Junction to case (R _{OJ-C}) (Max.)			°C/W	2.4	2.1	2
Turn -On Time (Max.)		f= 60/ 50 Hz.	ms	10 for Zero Voltage Turn-On		
	0.1 for Random Voltage Turn-On					
Turn -Off Time (Max.)		10 for Zero Voltage Turn-On				
		8.3/10 for Random Voltage Turn-On				

* See Derating curve

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"Mini Puck" Solid State Relay

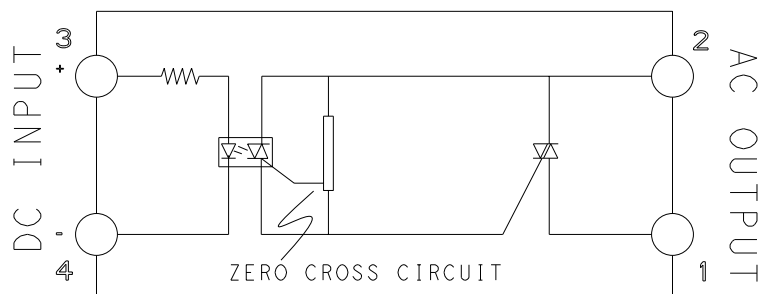
ELECTRICAL CHARACTERISTICS (THERMAL DERATING CURVES)



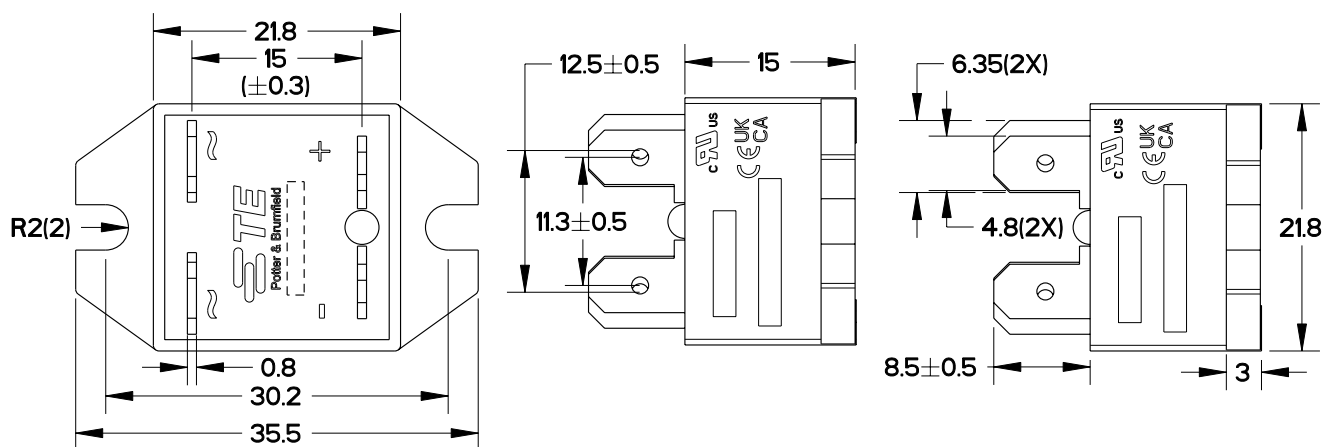
HEATSINK RECOMMENDATIONS

- We recommend that solid state relay modules be mounted to a heatsink sufficient to maintain the module's base temperature at 85°C under worst case ambient temperature and load conditions.
- The heatsink mounting surface should be a smooth (30-40 micro-inch finish), flat (30-40 micro-inch flatness across mating area), un-painted surface which is clean and free of oxidation.
- An even coating of thermal compound (Dow Corning DC340 or equivalent) should be applied to both the heatsink and module mounting surfaces and spread to a uniform depth of .002" to eliminate all air pockets.

OPERATING DIAGRAMS



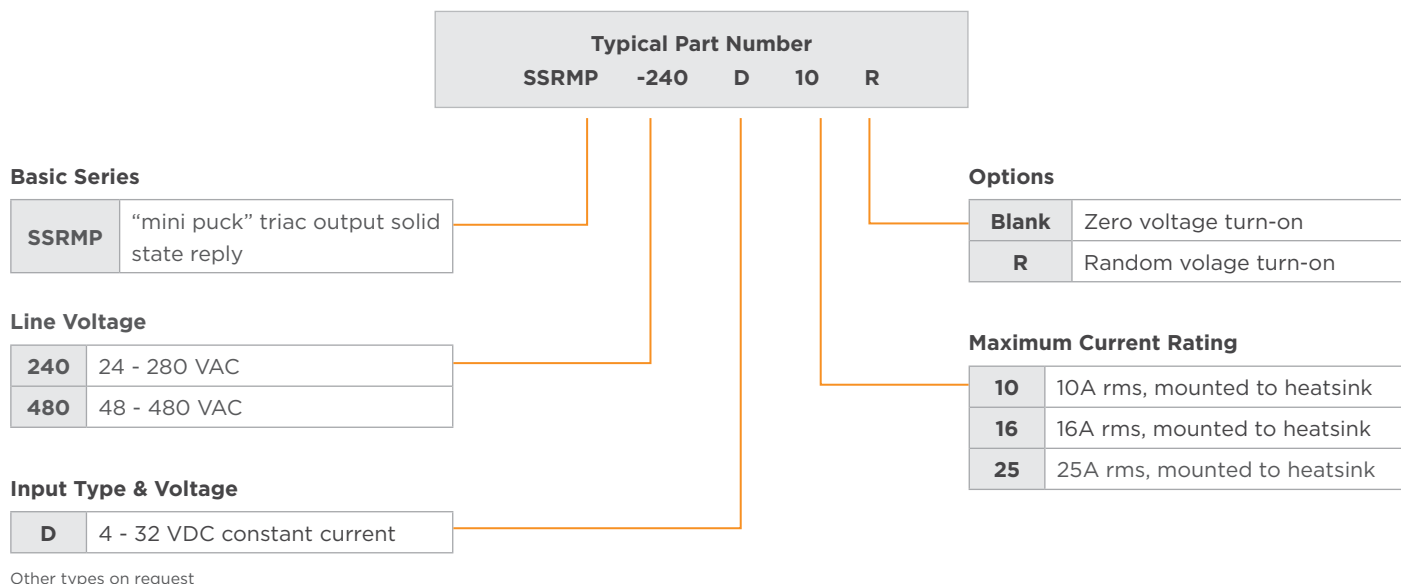
OUTLINE DIMENSIONS



Note:

- All dimensions are in mm

ORDERING INFORMATION



PART NUMBER LIST

TE Part Number	Product Code	TE Part Number	Product Code
2323802-1	SSRMP-240D25	2323802-9	SSRMP-240D10R
2323802-2	SSRMP-240D16	2323802-8	SSRMP-240D16R
2323802-3	SSRMP-240D10	2323802-7	SSRMP-240D25R
2323802-4	SSRMP-480D25	1-2323802-3	SSRMP-480D10R
2323802-5	SSRMP-480D16	1-2323802-2	SSRMP-480D16R
2323802-6	SSRMP-480D10	1-2323802-1	SSRMP-480D25R

OUR AUTHORIZED DISTRIBUTORS ARE MORE LIKELY TO MAINTAIN THE FOLLOWING ITEMS IN STOCK FOR IMMEDIATE DELIVERY.

Product code	
SSRMP-240D10	SSRMP-480D10
SSRMP-240D10R	SSRMP-480D10R
SSRMP-240D25	SSRMP-480D25
SSRMP-240D25R	SSRMP-480D25R

Notes:

- Catalog and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.
- Catalog and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at <http://relays.te.com/definitions>
- Catalog product data, 'Definitions' section, application notes and all specifications are subject to change.
- To view solid-state relay application notes [click here](#)

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