



SSRMP Series

“Mini Puck” Solid State Relay

UL US File E29244 CE

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.

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.

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).

Ordering Information

Typical Part Number	SSRMP	-240	D	10	R
1. Basic Series: SSRMP = “mini puck” triac output solid state reply					
2. Line Voltage: 240 = 24 - 280 VAC 480 = 48 - 480 VAC					
3. Input Type & Voltage: D = 4 - 32 VDC constant current					
4. Maximum Switchin Rating: 10 = 10A rms, mounted to heatsink 16 = 16A rms, mounted to heatsink 25 = 25A rms, mounted to heatsink					
5. Options: Blank = Zero voltage turn-on R = Random volage turn-on					

Our authorized distributors are more likely to maintain the following items in stock for immediate delivery.

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

Input Specifications

Parameter	Units	DC Input
Control Voltage Range V_{IN}	VDC	4 - 32
Must Operate Voltage $V_{IN(OP)}$ (Min.)	VDC	4
Must release Voltage $V_{IN(REL)}$ (Min.)	VDC	1
Input Current (Max.)	mA	1 - 20

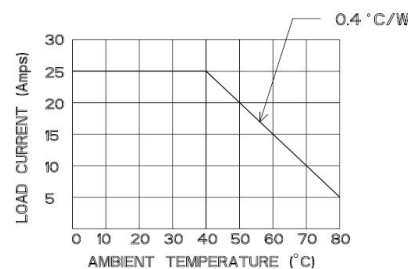
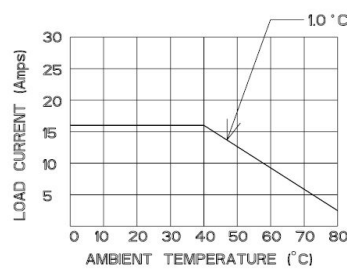
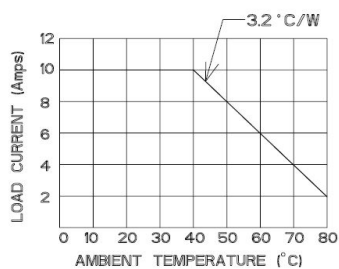
SSRMP Series (Continued)

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^*	240 & 480	Resistive	A	10	16	25
Single Cycle Surge Current			A	100	160	208
Leakage Current (Off-State) (@rated voltage)		f=60Hz. V_L =Nom	mA	5		
On-State Voltage Drop (@rated current)		I_L = Max.	Vrms	1.6		
Static dv/dt (Off-State) (Min.)			V/μs	400		475
Repetitive Peak Off-State Voltage			Vrms	600		
	480			800		
I^2T Rating	240 & 480		A ² Sec	55	144	259
Zero Turn-On Voltage			Vpk	15		
Thermal Resistance, Junction to case (R_{JC}) (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

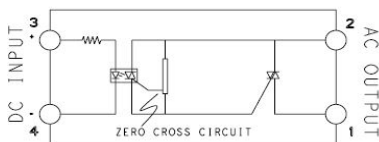
Electrical Characteristics (Thermal Derating Curves)



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

