

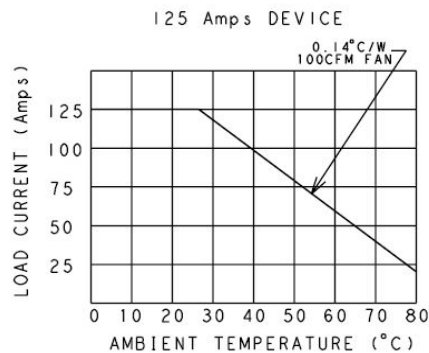
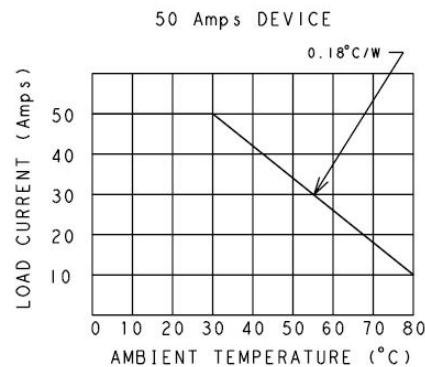
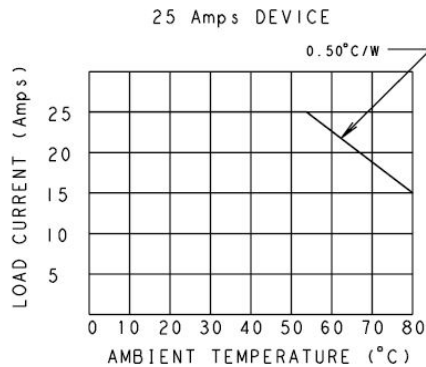
SSR Series (Continued)

Output Specifications (@ 25° C, unless otherwise specified)

Parameter	Nom. Line Voltage	Conditions	Units	25A Models	50A Models	125A Models
Load Voltage Range V_L	240V Model		V rms		24 - 280	
	480V Model		V rms		48 - 660	
Repetitive Blocking Voltage (Min.)	240V Model		V peak		600	
	480V Model		V peak		1200	
Load Current Range I_L^*	240 & 480V Models	Resistive	A rms	.1 - 25	.1 - 50	.1 - 125
Single Cycle Surge Current (Min.)	240 / 480V Models		A peak	300 / 400	520	1150
Leakage Current (Off-State) (Max.)	240V Model	$f = 60 \text{ Hz. } V_L = 240\text{V rms}$	mA rms		5	
	480V Model	$f = 60 \text{ Hz. } V_L = 480\text{V rms}$	mA rms		5	
On-State Voltage Drop (Max.)	240 & 480V Models	$I_L = \text{Max.}$	Vrms	1.6	1.8	1.8
Static dv/dt (Off-State) (Min.)	240 / 480V Models		V/ μs	300 / 500		1000
Thermal Resistance, Junction to Case ($R_{\theta JC}$) (Max.)	240 / 480V Models		°C/W	2.35 / 1.1	0.55	0.35
Turn-On Time (Max.)	240 & 480V Models	$f = 60 / 50 \text{ Hz.}$	ms	8.3 for Zero Voltage Turn-On DC input types, 40 for Zero Voltage Turn-On AC input types, 0.1 for Random Voltage Turn-On DC input types		
Turn-Off Time (Max.)	240 & 480V Models	$f = 60 / 50 \text{ Hz.}$	ms	10 for zero voltage DC input types, 80 for AC input types, 8.3-Random(DC)		
I ² T Rating	240 / 480V Models	$t = 8.3 \text{ ms}$	A ² Sec.	510 / 800	1350	6600
Load Power Factor Rating	240 & 480V Models	$I_L = \text{Max.}$		0.5 - 1.0		

* See Derating curve

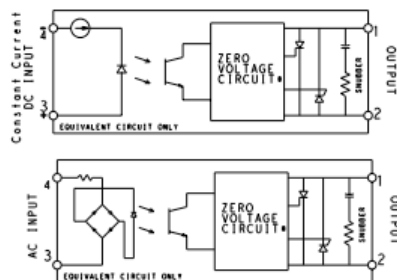
Electrical Characteristics (Thermal Derating Curves)



Heatsink Recommendations

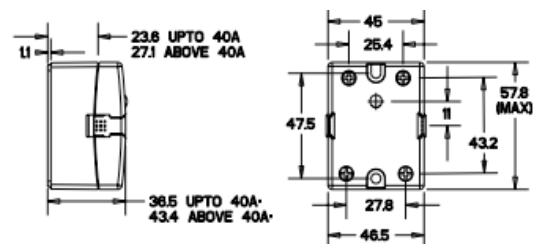
- We recommend that solid state relay modules be mounted to a heatsink sufficient to maintain the module's base temperature at less than 85°C under worst case ambient temperature and load conditions.
- The heatsink mounting surface should be a smooth (30-40 micro-inch finish), flat (30-40 micro-inch 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.
- The module should be mounted to the heatsink using two #8 screws.

Operating Diagrams



* Random Turn-on Units have a Random Turn-on circuit instead of Zero Voltage Circuit

Outline Dimensions



* Overall height dimensions includes with clear cover
Dimensions in mm

Mouser Electronics

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[SSR-240D25](#)