

# DIA SURGE ABSORBER (DSA)

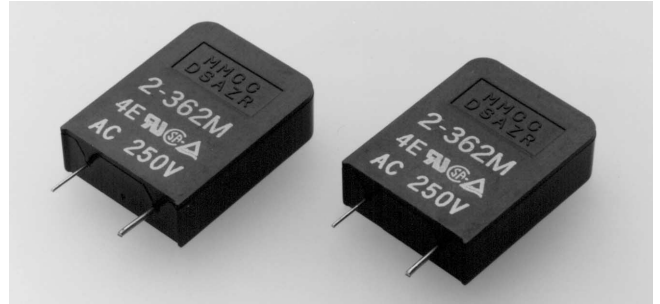
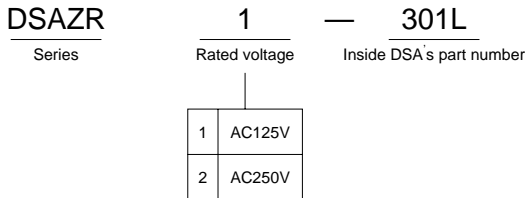
SURGE ABSORBER

## DSAZR Series

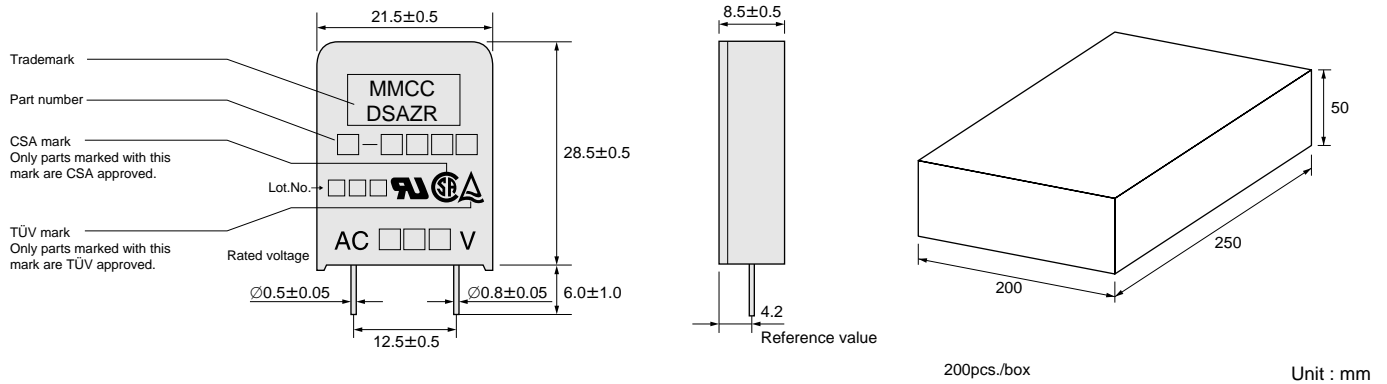
### ■Features

- Used to protect power supplies.
- Excellent for protecting TV-tuner circuits.
- Some models are recognized by UL, CSA and TÜV.

### ■Part number system



### ■Dimensions and packing form



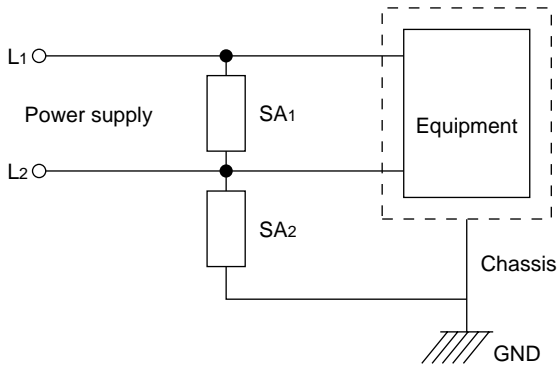
### ■Characteristics

Series	Rated voltage	Part number	DC spark-over voltage Vs	Insulation resistance IR		Electrostatic capacitance 1kHz-6V max. C	Surge current capacity 8/20μsec.	Surge life test.	Withstanding voltage	UL recognized		CSA approved 3) CSA22.2	EN approved 4)	
										1) UL1414	2) UL1449			
DSAZR	AC125V	DSAZR1-301L	500V (400~600)	100MΩmin.	DC100V	2pF max.	1000A	8/20μsec. 100A 300 times	—	—	○	—	—	
		DSAZR1-501M	600V (480~720)		DC250V				—	—	○	—	—	
		DSAZR1-102M	1100V (880~1320)		DC500V				—	—	○	—	—	
		DSAZR1-242M	2400V (1920~2880)						AC1200V-3sec.	○	○	○	—	—
		DSAZR1-282M	2800V (2240~3360)						AC1250V-3sec.	○	○	○	—	—
		DSAZR1-302M	3000V (2400~3600)						AC1500V-1min.	○	○	○	—	—
		DSAZR1-362M	3600V (2880~4320)						AC1800V-3sec.	○	○	○	—	—
		DSAZR1-402M	4000V (3200~4800)						AC2000V-1min.	○	○	○	—	—
	DSAZR1-452M	4500V (3600~5400)	AC2000V-1min.	○	—				○	—	—			
	DSAZR2-501M	800V (640~960)	DC250V	—	—				○	—	—			
	DSAZR2-102M	1400V (1120~1680)	DC500V	—	—				○	—	—			
	DSAZR2-242M	2400V (1920~2880)		AC1200V-3sec.	○				○	—	—			
	DSAZR2-302M	3000V (2400~3600)		AC1500V-1min.	○				○	○	○			
	DSAZR2-362M	3600V (2880~4320)		AC1800V-3sec.	○				○	○	○			
DSAZR2-402M	4000V (3200~4800)	AC2000V-1min.		○	○	○	○							
DSAZR2-452M	4500V (3600~5400)	DC1000V		AC2000V-1min.	○	—	○	○						

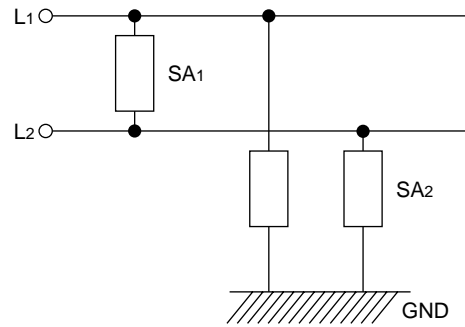
1) : UL Standard UL 1414 File No.E89615 (N)  
 2) : UL Standard UL 1449 File No.E70785 (S)  
 3) : CSA Standard C22.2 No.1 File No. LR87070-2  
 4) : DSAZR has received recognition to EN132400 through TÜV.  
 Report No. J9251508

# SURGE APPLICATIONS

## 1. Power supply requiring AC withstanding voltage test



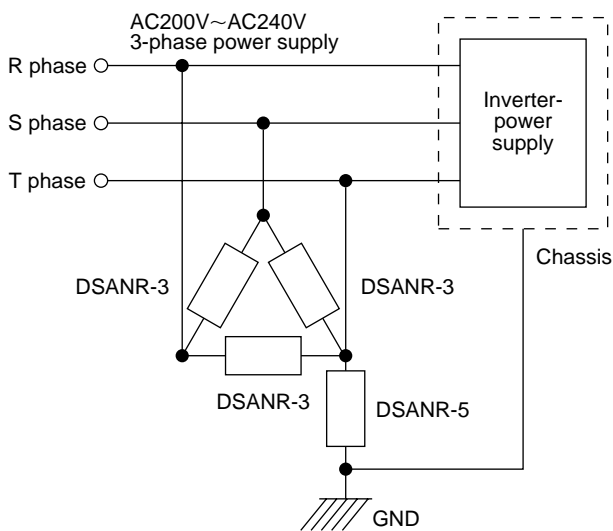
## 2. High quality supply



Conditions		Rated voltage	AC125V	AC250V
Normal mode (Between L1 and L2)		SA1	DSANR-1 DSAZR1-301L	DSANR-3 DSAZR2-501M
AC withstanding voltage test condition	Common mod (Between L1, L2-GND) SA2	Test is not required	DSANR-1 DSAZR1-301L	DSANR-3 DSAZR2-501M
		AC1200V	DSANR-4 DSAZR1-242M	DSAZR2-242M
		AC1500V	DSANR-5 DSAZR1-302M	DSANR-5 DSAZR2-302M
		AC1800V	DSANR-6 DSAZR1-362M	DSANR-6A DSAZR2-362M
		AC2000V	DSANR-10B DSAZR1-452M	DSANR-10B DSAZR2-452M

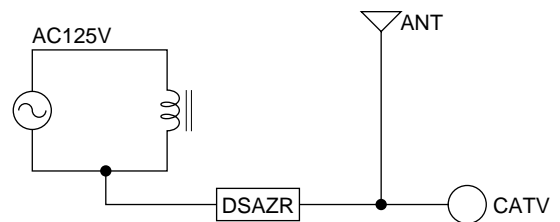
Applications : SW power supply, inverter power supply, power supply of office and home appliance

## 3. Equipment using a three-phase power supply

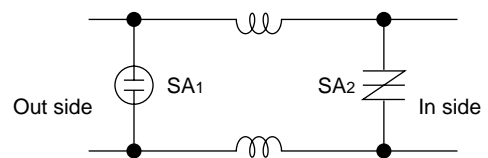


\* Example of a dielectric withstanding voltage test carried out at a voltage of AC 1500V applied between the RST phases and the ground.

## 4. TV tuner circuit : cold chassis



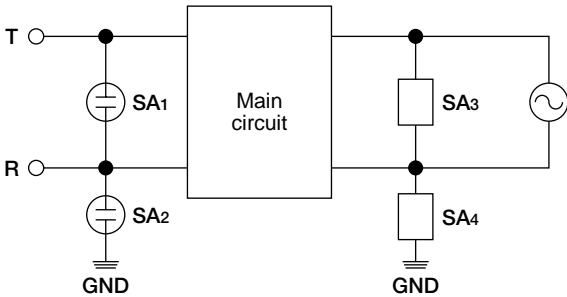
## 5. Sensor and data line



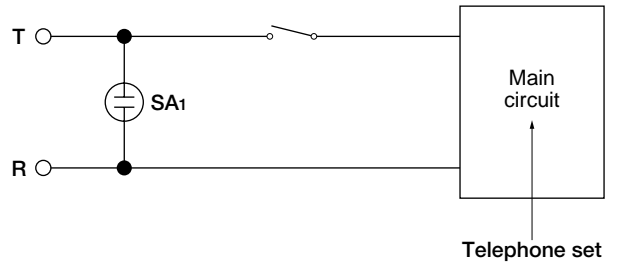
SA1 : DSS-201M  
SA2 : DSSA-P0300EA70, DSSA-P0300SA

# SURGE APPLICATIONS

## 6. Telecommunication equipment (FAX, KTS, PBX)

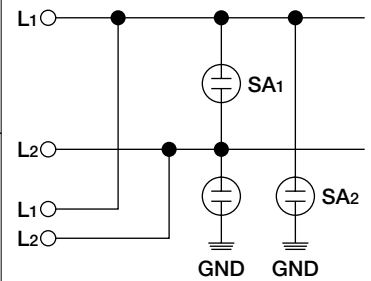


## Telephone (One piece, cordless, answering machine)



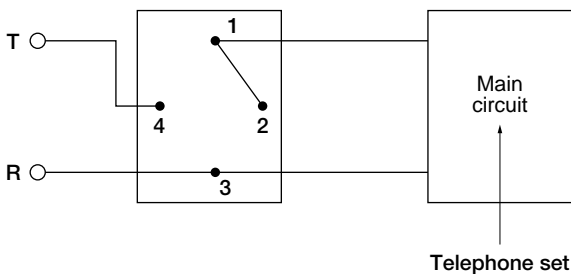
	Telecommunication interface			Power supply		
				AC125V	AC250V	
Normal mode	Between T and R. SA1	Japan, USA, EC and South East Asia	DSA-301LA DSS-301L	SA3	DSANR-1 DSAZR1-301L	DSANR-3 DSAZR2-501M
		Canada	DSS-401M			
Common mode	Between T, R and GND. SA2	AC withstanding test is not required	Same as SA1	SA4	DSANR-4 DSAZR1-242M	DSANR-5 DSANR-6A DSAZR2-302M DSAZR2-362M
		AC withstanding test is required	AC1200V → DSA-242MA AC1500V → DSA-302MA			

## Modem



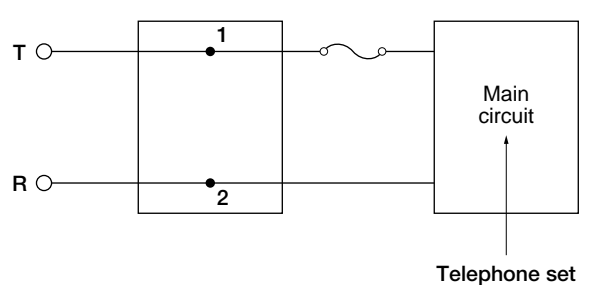
Applications : key telephone system, PBX, modem, answering phone, cordless telephone, normal telephone etc.

## 7. Overvoltage test circuit (DSSV-YD)



When the applied overvoltage is between tip and ring, the communication line is cut off by the wire opening.

## 8. Overvoltage test circuit (DSSV-T5)



When the applied overvoltage is between tip and ring, the circuit is cut off by the wire opening.