

CLASSIFICATION		SPECIFICATION		PAGE	1 / 4																		
SUBJECT		ACPA SURGE ABSORBER		DATE	2016-8-10																		
PART NUMBER		ACPA53D821K																					
1 Dimension																							
1.1	Appearance	No visible scarp. Clear marking.																					
1.2	Disk Dimension		<table border="1"> <tr><td>D</td><td>56 max.</td></tr> <tr><td>H</td><td>61 max.</td></tr> <tr><td>T</td><td>10.8 max.</td></tr> <tr><td>d</td><td>10.7± 0.5</td></tr> <tr><td>E</td><td>25.4 ± 1.0</td></tr> <tr><td>L</td><td>16.5min</td></tr> <tr><td>Φ</td><td>4.3 ± 0.2</td></tr> <tr><td>t</td><td>0.7 ± 0.1</td></tr> </table>	D	56 max.	H	61 max.	T	10.8 max.	d	10.7± 0.5	E	25.4 ± 1.0	L	16.5min	Φ	4.3 ± 0.2	t	0.7 ± 0.1	unit : mm			
D	56 max.																						
H	61 max.																						
T	10.8 max.																						
d	10.7± 0.5																						
E	25.4 ± 1.0																						
L	16.5min																						
Φ	4.3 ± 0.2																						
t	0.7 ± 0.1																						
1.3	Marking	Trade Mark , Spec., recognized																					
2 Packing																							
2.1	Quantity	144pcs																					
2.2	Packing Dimension	<table border="1"> <tr><td>P/N</td><td>:</td><td>.</td></tr> <tr><td>QUAN</td><td>:</td><td>.</td></tr> <tr><td>LOT NO</td><td>:</td><td>.</td></tr> <tr><td>DATE</td><td>:</td><td>.</td></tr> </table>	P/N	:	.	QUAN	:	.	LOT NO	:	.	DATE	:	.	<table border="1"> <tr><td>LP</td><td>403 max.</td></tr> <tr><td>HP</td><td>270 max.</td></tr> <tr><td>WP</td><td>273 max.</td></tr> </table>	LP	403 max.	HP	270 max.	WP	273 max.	unit : mm	
P/N	:	.																					
QUAN	:	.																					
LOT NO	:	.																					
DATE	:	.																					
LP	403 max.																						
HP	270 max.																						
WP	273 max.																						
3 Material List																							
3.1	Material Chart RoHs	Item	Composition																				
		Coating	Epoxy Resin																				
		Lead	Cp/Cu. Wire																				
		Electrode	Silver																				
		Disk	Zinc Oxide																				
		Solder	Sn:100%																				

CLASSIFICATION		SPECIFICATION	PAGE	2 / 4								
SUBJECT		ACPA SURGE ABSORBER	DATE	2016-8-10								
4 Electrical Test Method												
4.1	Varistor Voltage	The voltage between two terminals with the specified measuring current 1 mA DC applied is call Vb.										
4.2	Maximum Allowable Voltage	The recommended maximum sine wave voltage (rms) or the maximum DC voltage can be applied continuously.										
4.3	Maximum Clamping Voltage	The maximum voltage between two terminal with the specification standard impulse current (8/20 µsec).										
4.4	Rated Wattage	The maximum power that can be applied within the specified ambient temperature.										
4.5	Energy	The maximum energy within the varistor voltage change of ±10% when one impulse of 2msec. is applied.										
4.6	Withstanding Surge Current	The maximum current within the varistor voltage change of ±10% with the standard impulse current (8/20 µsec) applied one time.										
4.7	Varistor Voltage Temp. Coefficient	$\frac{V_b \text{ at } 20^{\circ}\text{C}(68^{\circ}\text{F}) - V_b \text{ at } 70^{\circ}\text{C}(158^{\circ}\text{F})}{V_b \text{ at } 20^{\circ}\text{C}(68^{\circ}\text{F})} \times \frac{1}{50} \times 100 (\%/^{\circ}\text{C})$										
5 Mechanical Test Method												
5.1	Terminal Pull Strength	<p>After gradually applying the load specified below and keeping the unit fixed for ten seconds , the terminal shall be visually examined for any damage.</p> <table border="0" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;"><u>Terminal diameter</u></th> <th style="text-align: center;"><u>Load</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0.6mm (.024")</td> <td style="text-align: center;">0.5kg (1.1 lbs)</td> </tr> <tr> <td style="text-align: center;">0.8mm (.031")</td> <td style="text-align: center;">1.0kg (2.2 lbs)</td> </tr> <tr> <td style="text-align: center;">1.0mm (.039")</td> <td style="text-align: center;">2.0kg (4.4 lbs)</td> </tr> </tbody> </table>			<u>Terminal diameter</u>	<u>Load</u>	0.6mm (.024")	0.5kg (1.1 lbs)	0.8mm (.031")	1.0kg (2.2 lbs)	1.0mm (.039")	2.0kg (4.4 lbs)
<u>Terminal diameter</u>	<u>Load</u>											
0.6mm (.024")	0.5kg (1.1 lbs)											
0.8mm (.031")	1.0kg (2.2 lbs)											
1.0mm (.039")	2.0kg (4.4 lbs)											
5.2	Terminal Bending Strength	<p>The unit shall be secured with its terminal kept vertical and the weight specified below be applied in the axial direction. The terminal shall gradually be bent by 90°in one direction , then 90°in the opposite direction , and again back to the original position. The damage of the terminal shall be visually examined.</p> <table border="0" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;"><u>Terminal diameter</u></th> <th style="text-align: center;"><u>Load</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0.6mm (.024")</td> <td style="text-align: center;">0.5kg (1.1 lbs)</td> </tr> <tr> <td style="text-align: center;">0.8mm (.031")</td> <td style="text-align: center;">1.0kg (2.2 lbs)</td> </tr> <tr> <td style="text-align: center;">1.0mm (.039")</td> <td style="text-align: center;">2.0kg (4.4 lbs)</td> </tr> </tbody> </table>			<u>Terminal diameter</u>	<u>Load</u>	0.6mm (.024")	0.5kg (1.1 lbs)	0.8mm (.031")	1.0kg (2.2 lbs)	1.0mm (.039")	2.0kg (4.4 lbs)
<u>Terminal diameter</u>	<u>Load</u>											
0.6mm (.024")	0.5kg (1.1 lbs)											
0.8mm (.031")	1.0kg (2.2 lbs)											
1.0mm (.039")	2.0kg (4.4 lbs)											

CLASSIFICATION		SPECIFICATION	PAGE	3 / 4
SUBJECT		ACPA SURGE ABSORBER	DATE	2016-8-10
5.3	Vibration	Subjected to simple harmonic motion of 0.75 mm (0.029") amplitude 1.5mm (0.058") maximum total excursion-between limits of 10 ~ 55 Hz. frequency scan shall then be applied for period of two hours in each of three mutually perpendicular direction , Thereafter , the unit shall be visually examined.		
5.4	Solderability	After dipping the terminal to a depth of approximately 3 mm (0.118") from the body in a soldering bath of 260°C (500°F) for two seconds , the terminal shall be visually examined.		
5.5	Resistance to Soldering Heat	The terminal shall be dipped into a soldering bath having a temperature of 350°C (660 °F) to a point 3 mm (0.118") from the body of the unit and then be held there for three seconds. The change of Vb and mechanical damage shall be examined.		
6 Environmental Test Method				
6.1	High Temperature Storage	The specimen shall be subjected to 125°C (257°F) for 1000 hours in a thermostatic bath without load and then stored at room temperature and humidity for one to two hours. Thereafter , The change of Vb Shall be measured.		
6.2	Humidity	The specimen shall be subjected to 40°C (104°F) , 90 to 95 % R.H. for 1000 hours without load and then stored at room temperature and humidity for one to two hours. Thereafter , the change of Vb shall be measured.		
6.3	Thermal Shock	The temperature cycle shown below shall be repeated five times and then stored at room temperature and humidity for one to two hours. The change of Vb as well as mechanical damage shall be examined.		
		Step	Temperature	Period
		1	-40°C(-40°F)	30 min.
		2	85°C(185°F)	30 min.
6.4	High Temperature Operation	After being continuously applied the Maximum Allowable Voltage at 85°C (185°F) for 1000 hours , the specimen shall be stored at room temperature and humidity for one to two hours. Thereafter , the change of Vb shall be measured.		
6.5	Humidity Operation	The specimen shall be subjected to 40°C (104°F),90 to 95%RH and the Maximum Allowable Voltage for 1000 hours and then stored at room temperature and humidity for one to two hours. Thereafter,the change of Vb shall be measured.		
6.6	Low Temperature Storage	The specimen shall be subjected to -40°C (-40°F) without load for 1000 hours and then stored at room temperature for one to two hours. Thereafter,the change of Vb shall be measured.		



CLASSIFICATION		SPECIFICATION		PAGE	4 / 4	
SUBJECT		ACPA SURGE ABSORBER		DATE	2016-8-10	
7 Electrical Test Requirements						
7.1	Varistor voltage	Vb : 738 V~ 902 V		Measuring current : 1 mA DC		
7.2	Maximum Allowable Voltage	AC : 510 V rms DC : 670 V				
7.3	Clamping Voltage	1355 V max.		Measuring current : 500 A Impulse waveform : 8/20 μ sec		
7.4	Rated Wattage	1.4 W				
7.5	Energy	1600 J		Impulse waveform : 8/20 μ sec		
7.6	Withstanding Surge Current	I Max	70000 A	Impulse waveform : 8/20 μ sec 8/20 μ sec , interval 5 min.		
		In	35000 A			
7.7	Varistor Voltage Temp. Coefficient	0 to 0.05% / $^{\circ}$ C		Temp. range : +25 $^{\circ}$ C ~ +85 $^{\circ}$ C		
7.8	Surge Life	Δ Vb / Vb \leq 10% at 200 A		Impulse waveform : 8/20 μ sec 10000 times by interval 10 sec		
7.9	Capacitance	3700 pF (reference)		Measure frequency : 1 KHz		
8 Mechanical Test Requirement						
8.1	Terminal Pull Strength	No outstanding damage		Load : 2.0 kg(4.4 lbs)		
8.2	Terminal Bending Strength	No outstanding damage		Load : 2.0 kg(4.4 lbs)		
8.3	Vibration	No outstanding damage		Frequency : 10 ~55 Hz Amplitude : 0.75 mm		
8.4	Solderability	Almost all the surface should be covered with solder uniformly		Solder Temp. : 260 $^{\circ}$ C \pm 2 $^{\circ}$ C Immersed time : 3 sec		
8.5	Resistance to soldering heat	Δ Vb / Vb \leq \pm 5% No outstanding damage		Solder Temp. : 350 $^{\circ}$ C \pm 2 $^{\circ}$ C Immersed time : 3 sec		
9 Environmental Test Requirements						
9.1	High Temperature Storage	Δ Vb / Vb \leq \pm 5%		Ambient temp. : 125 $^{\circ}$ C \pm 2 $^{\circ}$ C Time : 1000 hours		
9.2	Humidity	Δ Vb / Vb \leq \pm 5%		Ambient temp. : 40 $^{\circ}$ C \pm 2 $^{\circ}$ C Humidity : 90 to 95 % R.H. Time : 1000 hours		
9.3	Thermal Shock	Δ Vb / Vb \leq \pm 5%		Step	Temp.	Period
				1	-40 $^{\circ}$ C	30 min.
				2	85 $^{\circ}$ C	30 min.
				5 Cycles		
9.4	High Temperature Operation	Δ Vb / Vb \leq \pm 10%		Ambient temp. : 85 $^{\circ}$ C \pm 2 $^{\circ}$ C Time : 1000 hours		
9.5	Humidity Operation	Δ Vb / Vb \leq \pm 10%		Ambient temp. : 40 $^{\circ}$ C \pm 2 $^{\circ}$ C Humidity : 90 to 95 % R.H. Time : 1000 hours		
9.6	Low Temperature Storage	Δ Vb / Vb \leq \pm 5%		Ambient temp. : -40 $^{\circ}$ C \pm 2 $^{\circ}$ C Time : 1000 hours		

单击下面可查看定价，库存，交付和生命周期等信息

[>>ACPA\(华格科技\)](#)