





# Snubber Capacitors for IGBT Modules

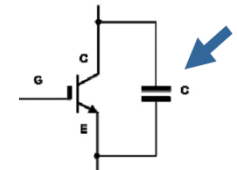
## Benefits & Features

- Wide capacitance & voltage range
- Direct mount version with six tab styles to fit most IGBTs
- 4-pin PCB mount version available
- Easy-To-Buy-From Philosophy
- Global footprint – manufacturing & sales
- Stable temperature characteristics
- Pb free/RoHS compliant
- Made with low-loss polypropylene film
- Safe failure mode

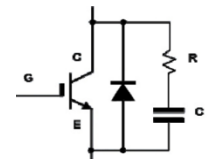
### Screw connections

### Pin connections

Snubber by itself	 <p><b>Series C4BS, C4BT</b> direct mount</p> <p>Cap value = 1uF per 100A IGBT rating</p>	 <p><b>Series C4AS, C4AT</b> PC board mount</p> <p>Cap value = 1uF per 100A IGBT rating</p>
	 <p><b>Series C4AS, C4AT</b> PC board mount</p> <p>Cap value = 0.25uF per 100A IGBT rating</p>	 <p><b>Series C4AS, C4AT</b> PC board mount</p> <p>Cap value = 0.25uF per 100A IGBT rating</p>



**Snubber capacitor by itself**



**Snubber capacitor in a network**

This is a starting point. The engineer will pick the capacitor voltage and final cap value.

## KEMET Snubber Capacitor Quick Selector Guide

Series	Capacitor type	Rated Voltage	Cap Range	Characteristics
<b>C4AS</b>	Radial Leads	850VDC/500VAC	0.15 - 5.0µF	<ul style="list-style-type: none"> <li>• Snubber applications</li> <li>• Climatic category (IEC 60068-1) 40/85/56</li> <li>• Pulse rise time (dv/dt) 469 to 3360V/µs</li> <li>• Pitch (p) p = 27.5, 37.5, 52.5mm</li> <li>• Terminals Tinned copper 2 or 4 wires</li> </ul>
		1000VDC/600VAC	0.15 - 4.7µF	
		1200VDC/630VAC	0.1 - 3.5µF	
		2000VDC/700VAC	0.033 - 1.5µF	
		3000VDC/750VAC	0.022 - 0.82µF	
<b>C4AT</b>	Radial Leads	250VDC/160VAC	1.0 - 60µF	<ul style="list-style-type: none"> <li>• Switching applications</li> <li>• Climatic category (IEC 60068-1) 40/85/56</li> <li>• Pulse rise time (dv/dt) 15 to 148V/µs</li> <li>• Pitch (p) p = 27.5, 37.5, 52.5mm</li> <li>• Terminals Tinned copper 2 or 4 wires</li> </ul>
		400VDC/250VAC	1.0 - 40µF	
		450VDC/275VAC	1.0 - 33µF	
		600VDC/350VAC	0.68 - 20µF	
		700VDC/400VAC	0.47 - 15µF	
<b>C4BS</b>	Direct Mount	850VDC/550VAC	0.47 - 5.0µF	<ul style="list-style-type: none"> <li>• Snubber-IGBT applications</li> <li>• Climatic category (IEC 60068-1) 40/85/56</li> <li>• Pulse rise time (dv/dt) 469 to 3361V/µs</li> <li>• Box Length (L) L = 32 to 57.5mm</li> <li>• Terminals Tinned brass lugs</li> </ul>
		1000VDC/600VAC	0.47 - 4.0µF	
		1200VDC/630VAC	0.33 - 3.3µF	
		2000VDC/700VAC	0.10 - 1.5µF	
		3000VDC/750VAC	0.047 - 0.82µF	
<b>C4BT</b>	Direct Mount	250VDC/160VAC	4.7 - 60µF	<ul style="list-style-type: none"> <li>• Switching-IGBT applications</li> <li>• Climatic category (IEC 60068-1) 40/85/56</li> <li>• Pulse rise time (dv/dt) 27 to 148V/µs</li> <li>• Box Length (L) L = 32 to 57.5mm</li> <li>• Terminals Tinned brass lugs</li> </ul>
		400VDC/250VAC	3.3 - 40µF	
		600VDC/330VAC	2.5 - 20µF	
		700VDC/400VAC	1.5 - 15µF	
		850VDC/450VAC	1.0 - 10µF	

