



Film Snubber Capacitors for IGBT Modules



Why Buy From KEMET?





KEMET is your seamless, integrated, single source for capacitance solutions worldwide. With 95% of possible dielectric solutions, global availability, on-time delivery, plus full custom design services. One world. One source. One KEMET.

Features & Benefits

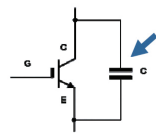
- Wide capacitance & voltage range
- Direct mount version with six tab styles to fit most IGBTs
- 4-pin PCB mount version available
- Stable temperature characteristics
- Pb-free/RoHS-compliant
- Made with low-loss polypropylene film
- Safe failure mode

Programs Supported

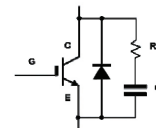
- Snubber
- Switching
- Snubber-IGBT
- Switching-IGBT

	Screw connections		Pin connections
Snubber by itself	 <p>Cap value = $1 \mu\text{F}$ per 100A IGBT rating</p> <p>Series C4BS, C4BT direct mount</p>		 <p>Cap value = $1 \mu\text{F}$ per 100A IGBT rating</p> <p>Series C4AS, C4AT PC board mount</p>
Snubber with diode	 <p>Cap value = $0.25 \mu\text{F}$ per 100A IGBT rating</p> <p>Series C4AS, C4AT PC board mount</p>		 <p>Cap value = $0.25 \mu\text{F}$ per 100A IGBT rating</p> <p>Series C4AS, C4AT PC board mount</p>

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



Snubber capacitor by itself



Snubber capacitor in a network

KEMET Products

Series	Capacitor Type	Rated Voltage	Cap Range	Characteristics
C4AS	Radial Leads	850 VDC/500 VAC	0.15 – 5.0 μF	<ul style="list-style-type: none"> • Snubber applications • Climatic category (IEC 60068-1) 40/85/56 • Pulse rise time (dv/dt) 469 to 3360 V/μs • Pitch (p) ρ = 27.5, 37.5, 52.5 mm • Terminals tinned copper 2 or 4 wires
		1000 VDC/600 VAC	0.15 – 4.7 μF	
		1200 VDC/630 VAC	0.1 – 3.5 μF	
		2000 VDC/700 VAC	0.033 – 1.5 μF	
		3000 VDC/750 VAC	0.022 – 0.82 μF	
C4AT	Radial Leads	250 VDC/160 VAC	1.0 – 60 μF	<ul style="list-style-type: none"> • Switching applications • Climatic category (IEC 60068-1) 40/85/56 • Pulse rise time (dv/dt) 15 to 148 V/μs • Pitch (p) ρ = 27.5, 37.5, 52.5 mm • Terminals tinned copper 2 or 4 wires
		400 VDC/250 VAC	1.0 – 40 μF	
		450 VDC/275 VAC	1.0 – 33 μF	
		600 VDC/350 VAC	0.68 – 20 μF	
		700 VDC/400 VAC	0.47 – 15 μF	
		850 VDC/450 VAC	0.22 – 10 μF	
C4BS	Direct Mount	850 VDC/550 VAC	0.47 – 5.0 μF	<ul style="list-style-type: none"> • Snubber-IGBT applications • Climatic category (IEC 60068-1) 40/85/56 • Pulse rise time (dv/dt) 469 to 3361 V/μs • Box Length (L) L = 32 to 57.5 mm • Terminals tinned brass lugs
		1000 VDC/600 VAC	0.47 – 4.0 μF	
		1200 VDC/630 VAC	0.33 – 3.3 μF	
		2000 VDC/700 VAC	0.10 – 1.5 μF	
		3000 VDC/750 VAC	0.047 – 0.82 μF	
C4BT	Direct Mount	250 VDC/160 VAC	4.7 – 60 μF	<ul style="list-style-type: none"> • Switching-IGBT applications • Climatic category (IEC 60068-1) 40/85/56 • Pulse rise time (dv/dt) 27 to 148 V/μs • Box Length (L) L = 32 to 57.5 mm • Terminals tinned brass lugs
		400 VDC/250 VAC	3.3 – 40 μF	
		600 VDC/330 VAC	2.5 – 20 μF	
		700 VDC/400 VAC	1.5 – 15 μF	
		850 VDC/450 VAC	1.0 – 10 μF	

For more information, samples and engineering kits, please visit us at www.kemet.com or call 1.877.myKEMET.