



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
M.E., POWER ELECTRONICS & DRIVES
Activity Supports Employability/Entrepreneurship/Skill Development

Course Code : 19PPE101
Course Name : Power Electronic Converters
Academic Year : 2020 – 2021 (ODD) **Year/Sem:** I/I

Category	Employability
Activity	Animated videos of real time applications in industries
Topic	Snubber circuit Design

The screenshot shows a spreadsheet for 'Snubber Design (RC)'. It is divided into 'ENTER Values' and 'Result Values' sections.

ENTER Values						Result Values			
Steps	Values	Unit	Symbol	Parameters	Remarks	325.22 V	Vpeak	Peak Voltage	
1	600	V	V_{om}	Non-Repitive Peak Reverse Voltage		1.63 uH	L	Inductor	ignore di/dt if Motor Load
	5	A	$I_{(RMS)}$	RMS On-State Current		0.1 uF	C_s	Snubber Capacitance	
						16.94 Ohm	R_s	Snubber Resistance	
2	200	A/uSec	di/dt	Rate of Change of On-State Current	If Not Given take ITSM	10.58 W	P	Power Calculation for Resistance wattage	
	200	A	I_{trr}	Peak Surge (Non-Repitive) On-State Current,					
3	230	V	V_{rms}	Supply RMS Voltage	AC				
4	24	Ohm	R_L	Load Resistance	Load Resistance				
	250	V/uSec	dv/dt	Critical Rate of Rise of Off-State Current					
5	8	A	load (Peak)	Load Current	Load A				

The circuit diagram shows a series combination of a load resistor R_L and a snubber network consisting of a resistor R_s and a capacitor C in parallel. The input is V_{rms} . A photograph of a physical snubber component is also shown.

Screen shot of video shown to students

Outcome	Knowledge gained to Design different power converters namely AC to DC, DC to DC and AC to AC converters through these activities help to improve the employment opportunities of the students in core industries.
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Course Instructor


PG Head