

Snubber Module for IGBT

MS1250D225N

● **Features**

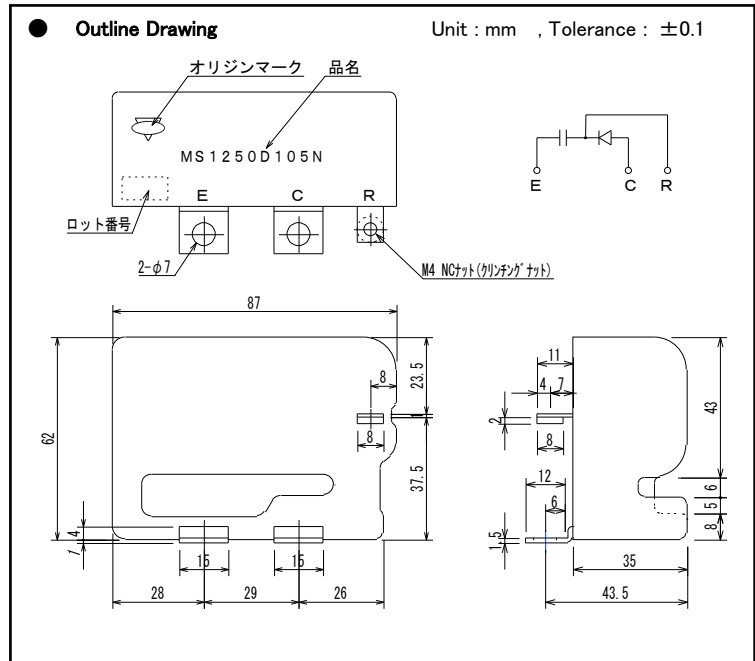
- Special diodes which are low VF and short reverse recovery time are used.
- Low loss by use of metalized polypropylene film condenser.
- Low inductance by connection of shortest distance.
- Compact size and light weight of equipments are possible.

● **Applications**

- For snubber circuits of IGBT such as inverters and stabilized power supplies.

● **Structures**

- Diode : Silicon epitaxial planar diode.
- Condenser : Metalized film condenser.
- Conforms to RoHS regulations



● **Absolute Maximum Ratings of Snubber module**

Items	Symbol	Conditions	Ratings	Unit
Operating Temperature	T _{emp.}		-40~+85	°C
Voltage	V _{RM}		1200	V
RMS Voltage	V _{ISO}	50-60Hz Sinusoidal Waveform from Terminals to case for 1 Min.	2500	V
		50-60Hz Sinusoidal Waveform from Terminals to case for 1 Sec.	3000	V
RMS Resistance	R _{ISO}	DC 500V	100	MΩ

● **Absolute Maximum Ratings of Diode**

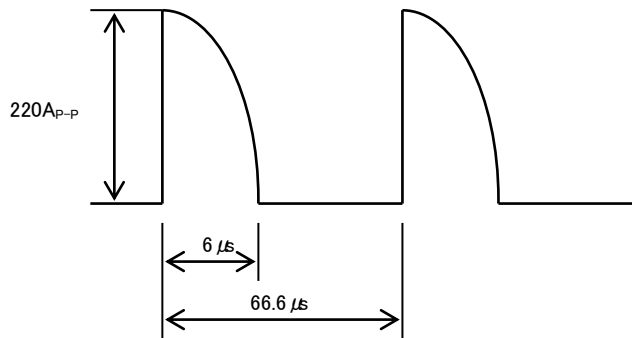
Items	Symbol	Conditions	Ratings	Unit
Peak Reverse Voltage	V _{RM}		1200	V
Average Rectified Forward Current	I _O	T _T =50°C (Terminal temperature), Resistance Load	50	A
Peak Forward Surge Current	I _{FSM}	T _a =25°C, 50Hz, Single-phase, Half sin wave, Non-Repetitive	500	A
Operating Junction Temperature	T _j		-40~+150	°C
Storage Temperature	T _{arg}		-40~+150	°C

● **Electrical Characteristics of Diode**

Items	Symbol	Conditions	MAX.	Unit
Forward Voltage Drop	V _F	T _a =25°C, I _F =50A	2.7	V
Reverse Current	I _R	T _a =25°C, V _R =1200V	100	μA
Reverse Recovery Time	t _{rr}	T _a =25°C, I _F =30A, -dif/dt=300A/μs	200	ns

● Characteristics of Condenser

Items	Performance Specifications
Capacitance	2.2 μF $\pm 10\%$
$\tan \delta$	0.001
Current (*1)	220 A _{p-p}



(*1) Current Waveform