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## CIRCULAR ANTENNAS

**MT-242047/NRH/K**  
**865 - 870 MHZ, 8.5DBIC RHCP READER ANTENNA**



### ELECTRICAL

REGULATORY COMPLIANCE	RoHS, CE 0682
FREQUENCY RANGE	865-870 MHz
GAIN	8.5 dBic (min) , 9.5dBic (max)
VSWR	1.3 : 1(max)
POLARIZATION	RHCP
3dB ELEVATION BEAMWIDTH	65° (typ)
3dB AZIMUTH BEAMWIDTH	65° (typ)
F/B RATIO	-17 dB (max)
POWER	6W (max)
INPUT IMPEDANCE	50 (ohm)
AXIAL RATIO AT BORESIGHT	0.7 dB (typ) , 1.3 dB (max)
LIGHTNING PROTECTION	DC Grounded

### MECHANICAL

DIMENSIONS (LxWxD)	305x305x25mm (max)
CONNECTOR	N-Type Female
WEIGHT	1.2 kg (max)
MOUNTING KIT	MT-120018
RADOME MATERIAL	Plastic
BASE PLATE MATERIAL	Aluminum with chemical conversion coating
OUTLINE DRAWING	RD43107200C

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### ENVIRONMENTAL

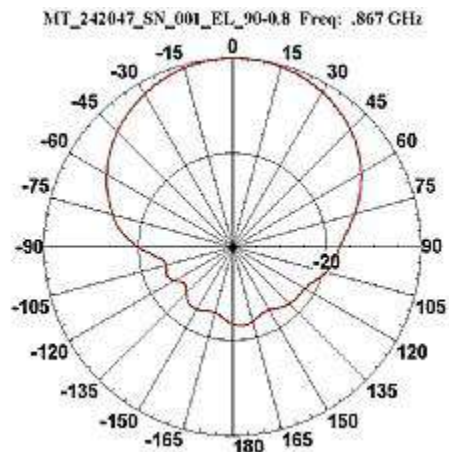
TEST	STANDARD	DURATION	TEMPERTURE	NOTES
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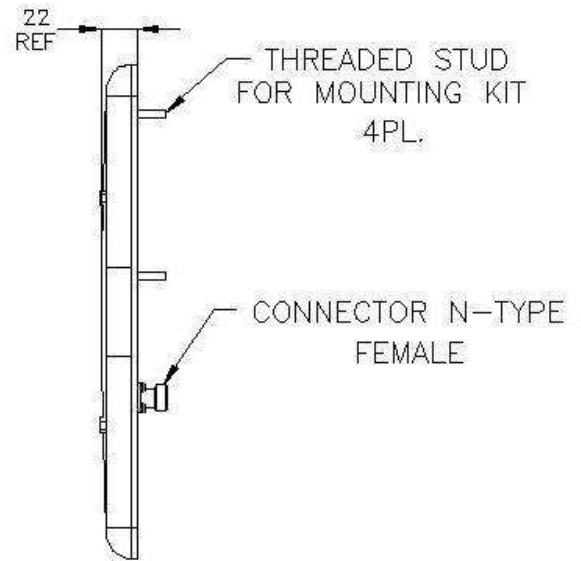
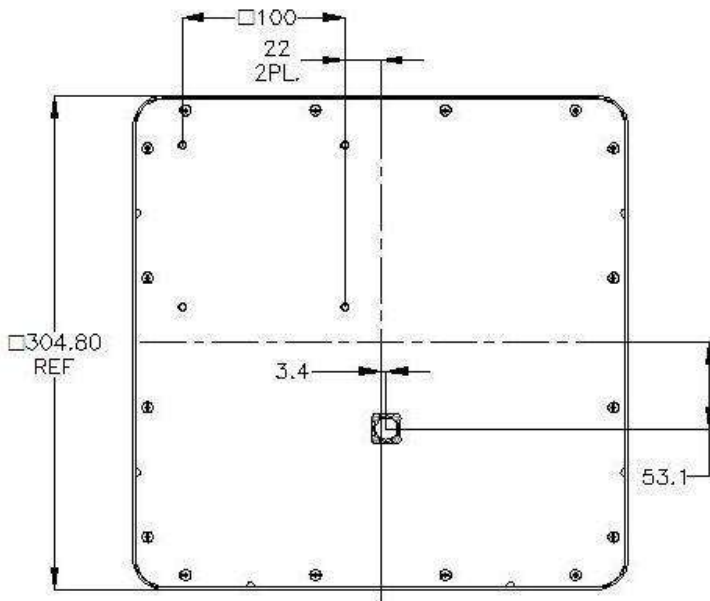
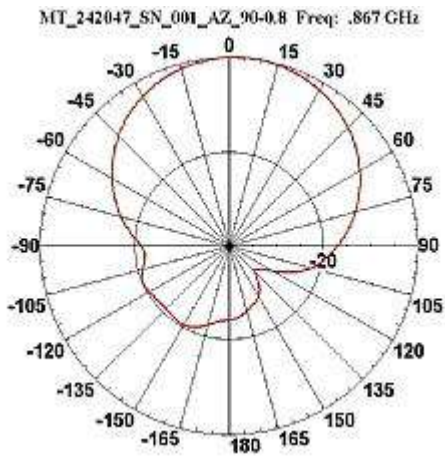
LOW TEMPERATURE	IEC 68-2-1	72 h	-55°C	
HIGH TEMPERATURE	IEC 68-2-2	72 h	+71°C	
TEMP. CYCLING	IEC 68-2-14	1 h	-45°C +70°C	3 Cycles
THERMAL SHOCK NONO-OPERATING			-30°C to+70°C	Ramp 30°C/min
HUMIDITY	ETSI EN300-2-4 T4.1E	144 h		95%
WATER TIGHTNESS	IEC 529			IP67 (*please see comment below)
DUST RESISTANCE				IP67
SOLAR RADIATION	ASTM G53	1000h		
OZONE RESISTANCE	ETSI 300			
FLAMMABILITY	UL 94			Class HB
QUASI RANDOM VIBRATION				2 0g rms for 4 hours
VEHICLE VIBRATION OPERATING	1 grms, 10-500 Hz, in 3 axis			6 hours total, 2 hr in each axis. Accelerated wear – an additional 50hrs in worst case axis.
MECHANICAL SHOCK OPERATING	10g,11msec, half sine pulse			

\*For outdoor installations that require mounting the antenna horizontally facing ground, please contact MTI representative for the dedicated P/N

**AZIMUTH RADIATION PATTERN MIDBAND  
FREQ. 0.867 GHZ**

**ELEVATION RADIATION PATTERN MIDBAND  
FREQ. 0.867 GHZ**





WAIVER!

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