

RQL Series (20W ~100W)

Ceramic Encased Wire Wound Resistors for Automobile



**Automotive Grade
AEC-Q200**

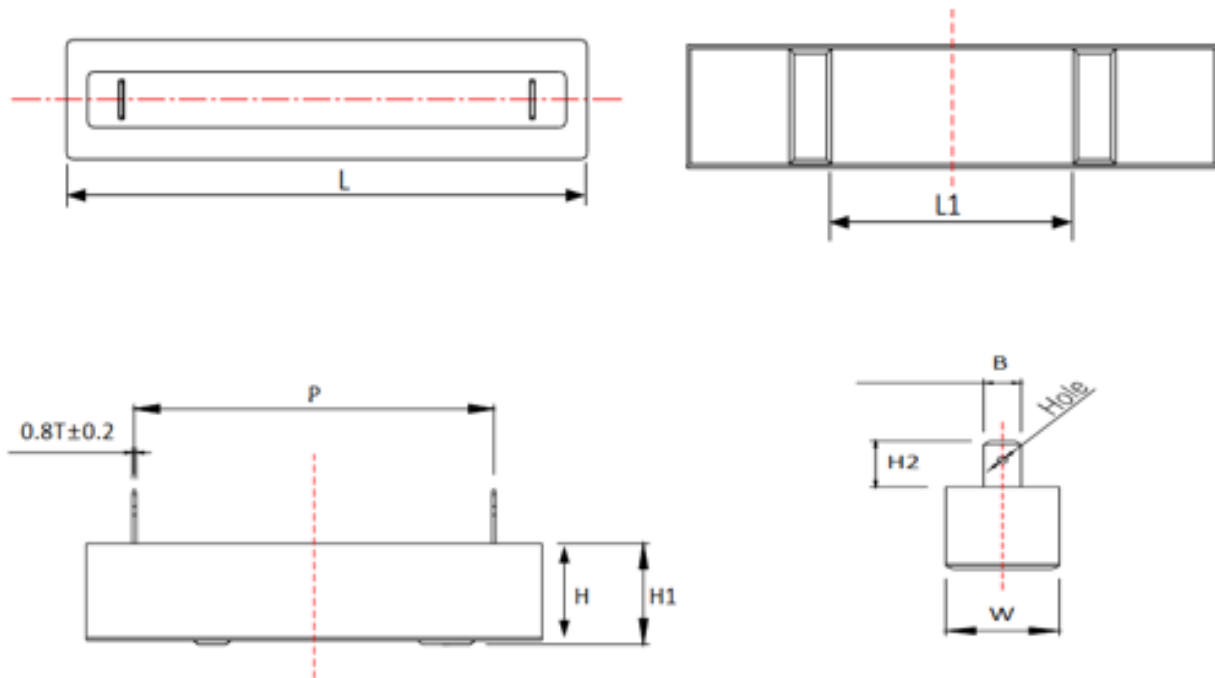
- Power Rating from 20W to 100W
- Resistance Range of 0.5Ω to 3KΩ
- Tolerances of 0.5% 1 %, 5%, or 10%
- Compact Design
- All Materials are Fire Resistant
- Very Good Thermal Insulation
- Non-Inductive Winding Available

■ The RQL models are Ceramic Encased , Wire Wound Resistors for Vehicle, EV, HEV, PHEV . FCEV

■ SPECIFICATIONS

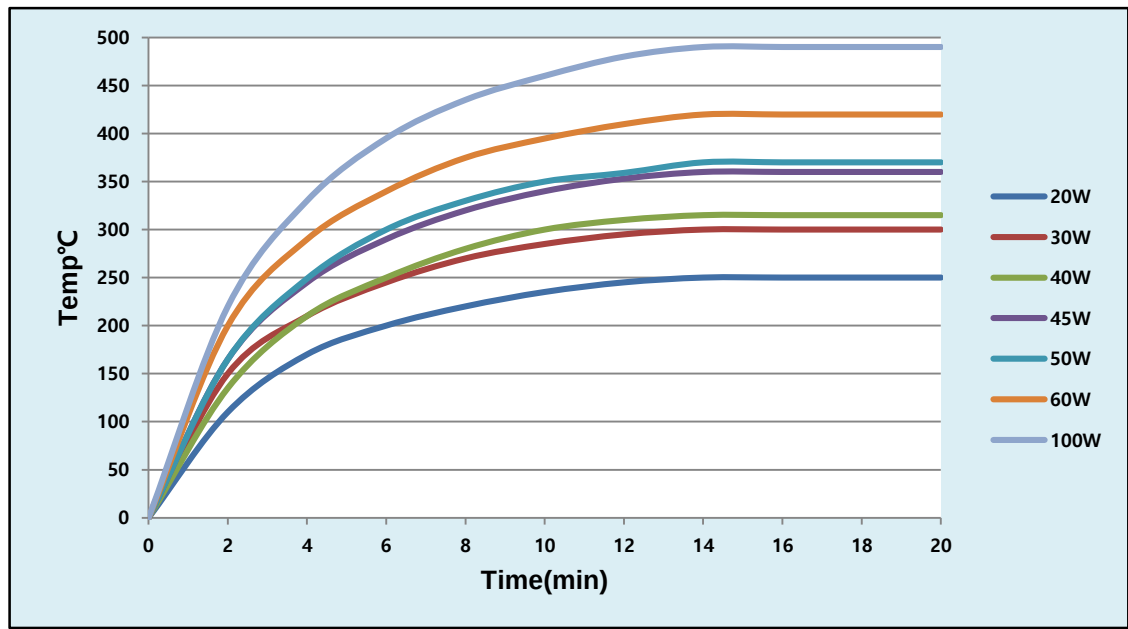
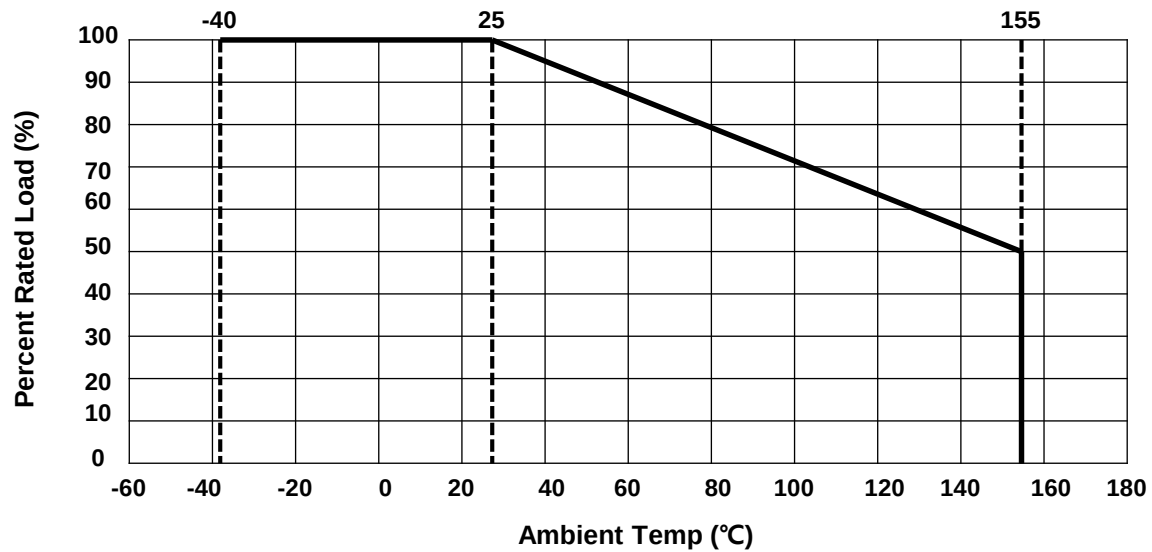
Test item	Test Condition	Test time	Reference
High Temperature Exposure)	150°C	1,000hr	MIL-STD-202 Method 108
Temperature Cycle	(-55 ~ 150)°C	1hr/cycle, 1,000cycle = 1,000hr	JESD22-A104
Biased Humidity	85°C, 85%R.H.	1,000hr	MIL-STD-202 Method 103
Operational Life	150°C	1,000hr	MIL-STD-202 Method 108
Mechanical Shock	100G, 6ms, 3Time/6-axis	-	MIL-STD-202 Method 213
Vibration Test	(10~2,000) Hz, 5G, 4hr each axis, 3 axes total	-	MIL-STD-202 Method 204
Resistance to Soldering Heat	(260±5)°C,	-	MIL-STD-202 Method 210
Solderability	(235±5)°C,	(5±0.5)s	J-STD-002
Resistance to Solvent	* Solvent 3 1. Solvent A) Isopropyl Alcohol : Mineral Spirits = 1 : 3 2. Solvent C) Terpene Defluxer 3. Solvent D) Water : Propylene glycol monomethyl ether Monoethanolamine = 42 : 1 : 1	-	MIL-STD-202 Method 215
Terminal Strength	1. Wire Type : Pull Test / Force 40N (Nominal cross-sectional area≥1.20mm²) 2. Flat pin Type	-	MIL-STD-202 Method 211
Withstand voltage test	2500Vac	60sec	AEC-Q200
Insulation resistance	1000VDC / 1000MΩ	60sec	AEC-Q200
ESD	Direct Contact(6kV) ~ Air Discharge(12~25kV)	-	AEC-Q200-002

■ DIMENSIONS



Model	Power Rating	Resistance Range (Ω)	Dimensions(mm)								Weight (g)
			$L \pm 1$	$L1 \pm 0.5$	$W \pm 1$	$P \pm 1$	$H \pm 1$	$H1 \pm 1$	$H2 \pm 1$	$B \pm 0.5$	
RQLS 20	20W	0.5~1K	63	25	13	46.5	12.5	13.3	8.5	6.3	25
RQLU 20	20W	0.5~1K	60	39.5	19	39	19	20	10	6.3	53
RQL 20	20W	0.5~1K	60	18.3	18	36.4	19	20	9	6.3	50
RQLU 30	30W	0.5~1K	74	38	19	52	19	20	10	6.3	63
RQL 30	30W	0.5~1K	75.5	26	19	46	18.5	20	9	6.3	65
RQLU 40	40W	0.5 ~2K	90	39.5	19	69	19	20	10	6.3	76
RQL 40	40W	0.5 ~2K	90	37.5	18	69	19	20	9	6.3	74
RQL 45	45W	0.5 ~2K	90	37.5	18	69	19	20	9	6.3	74
RQL 50	50W	0.5 ~2K	90	37.5	18	69	19	20	9	6.3	74
RQL 60	60W	0.5 ~2K	90	37.5	18	69	19	20	9	6.3	74
RQL 80	80W	0.5 ~3K	113	45	22	89	21	22	8	6.3	130
RQL 100	100W	0.5 ~3K	113	45	22	89	21	22	8	6.3	130

▣ POWER DERATING CURVE & FREE AIR SURFACE TEMPERATURE RISE



▣ HOW TO ORDER

RQ	L	50W	25Ω	J
TYPE	STYLE	POWER RATING	NOMINAL RESISTANCE	RESISTANCE TOLERANCE