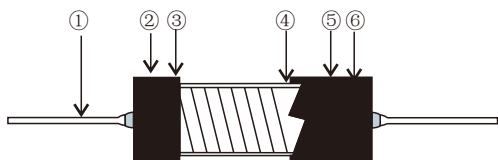


● Features

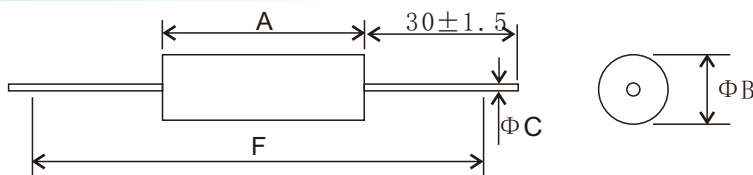
- I Low Resistance
- II High Precision
- III Full Molded Construction
- IV Non-inductance
- V Moisture-proof

● Construction



①	lead wire
②	cap
③	cermic base
④	wire wound
⑤	marking
⑥	full moded construction

● Dimensions



Type	Power (W)	Dimensions(mm)			F(mm)
		A±0.25	Φ B±0.25	Φ C	
BWL05	0.5	7.0	3.0	0.8	27.0
BWL10	1.0	11.0	3.0	0.8	31.0
BWL20	2.0	11.0	3.0	0.8	31.0
BWL30	3.0	14.0	5.2	0.8	34.0
BWL40	4.0	18.6	6.5	0.8	38.0
BWL50	5.0	24.0	8.4	1.0	44.0
BWL70	7.0	27.0	9.5	1.0	47.0
BWL100	10.0	46.5	10.0	1.0	66.0

● Reference Standards

JIS C 5201-1

● Ordering Information

Example:

BWL	05	D	R01	C
(1)	(2)	(3)	(4)	(5)
Series Name	Power Rating	Resistance Tolerance	Resistance Value	TCR

(1)Type: BWL SERIES

(2)Power Rating: 05=0.5W、 10=1W、 20=2W、 30=3W、 40=4W、 50=5W、 70=7W、 100=10W

(3)Tolerance: D=±0.5%、 F=±1%、 J=±5%.

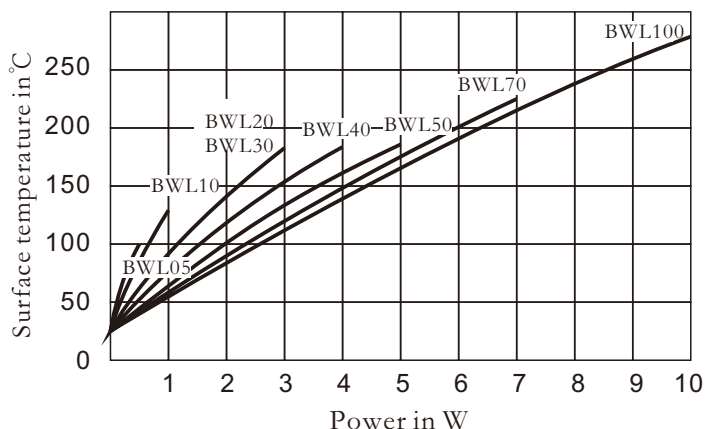
(4)Resistance Value:R10=0.1Ω、 R003=0.003Ω

(5)TCR: ±25ppm/°C, ±50ppm/°C ±100ppm/°C, ±250ppm/°C

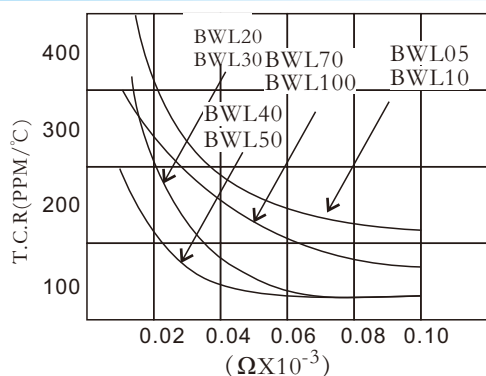
Applications And Ratings

Type	Power (W)	Resistance Range(Ω)	
		MIN	MAX
BWL05	0.5	R005	1K
BWL10	1.0	R005	1K
BWL20	2.0	R005	10K
BWL30	3.0	R005	10K
BWL40	4.0	R005	15K
BWL50	5.0	R005	24K
BWL70	7.0	R005	24K
BWL100	10.0	R01	39K

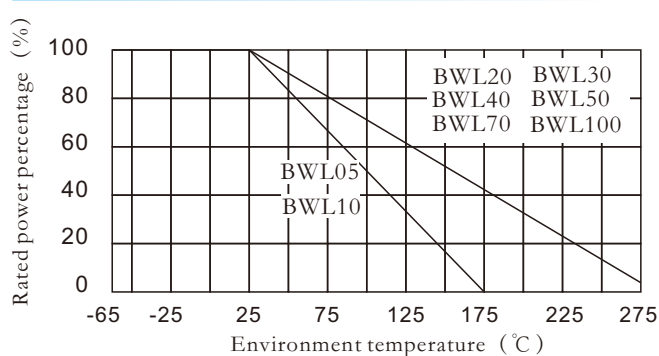
Surface Temperature Rise



TCR vs Resistance Value



Derating Curve



Performance Characteristics

PARAMETER/TEST	CONDITIONS OF TEST	TEST LIMITS
Thermal Shock	-65°C to +125°C, 5cycles, 15min at each extrem	$\Delta R \leq \pm (0.2\% + 0.0005\Omega)$
Short Time Overload	5x rated power (BWL005,01,03,04,05), 10x rated power (BWL10) for 5s	$\Delta R \leq \pm (0.5\% + 0.0005\Omega)$
Low Temperature Storage	-65°C for 24h	$\Delta R \leq \pm (0.2\% + 0.0005\Omega)$
High Temperature Exposure	250h at +275°C (+175°C for BWL005 and BWL01)	$\Delta R \leq \pm (2.0\% + 0.0005\Omega)$
Dielectric Withstanding Voltage	1000Vrms, 1min	$\Delta R \leq \pm (0.1\% + 0.0005\Omega)$
Insulation Resistance	MIL-STD-202 Method 302, 100V	1000M Ω minimum
Moisture Resistance	MIL-STD-202 Method 106, 1007b not applicable	$\Delta R \leq \pm (0.2\% + 0.0005\Omega)$
Shock, Specified Pulse	MIL-STD-202 Method 231, 100g ² s for 6ms, 10shocks	$\Delta R \leq \pm (0.1\% + 0.0005\Omega)$
Vibration, High Frequency	Frequency from varied 10 to 2000Hz, 20g peak, 2directions 6h each	$\Delta R \leq \pm (0.1\% + 0.0005\Omega)$
Load Life	2000h at rated power, +25°C, 1.5h"ON", 0.5h"OFF"	$\Delta R \leq \pm (2.0\% + 0.0005\Omega)$
Solderability	ANSI J-STD-002	95% coverage
Bias Humidity	+85°C, 85%RH, 10% bias, 1000h	$\Delta R \leq \pm (1.0\% + 0.0005\Omega)$