

**NEW!**

# High Voltage Power Inductors MSS1514V



- 15.5 × 15.5 mm footprint; 13.9 mm high shielded inductors
- High voltage rating of 800 V
- 6 inductance values from 33  $\mu$ H to 1000  $\mu$ H
- Low DCR and excellent current handling

**Core material** Ferrite

**Core and winding loss** See [www.coilcraft.com/coreloss](http://www.coilcraft.com/coreloss)

**Environment** RoHS compliant, halogen free

**Terminations** RoHS compliant matte tin over nickel over phos bronze. Other terminations available at additional cost.

**Weight:** 9.6 – 10.6 g

**Operating voltage** 800 V max

**Ambient temperature** –40°C to +125°C with (40°C rise) Irms current.

**Maximum part temperature** +165°C (ambient + temp rise). [Derating](#).

**Storage temperature** Component: –40°C to +165°C.

Tape and reel packaging: –40°C to +80°C

**Resistance to soldering heat** Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at <30°C / 85% relative humidity)

**Packaging** 175/13" reel; Plastic tape: 32 mm wide, 0.5 mm thick, 24 mm pocket spacing, 14.3 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).

Part number <sup>1</sup>	Inductance <sup>2</sup> ( $\mu$ H)	DCR max <sup>3</sup> (Ohms)	SRF typ <sup>4</sup> (MHz)	Isat (A) <sup>5</sup>			Irms (A) <sup>6</sup>	
				10% drop	20% drop	30% drop	20°C rise	40°C rise
MSS1514V-333MED	33 $\pm$ 20%	0.026	8.6	5.6	6.4	7.2	3.8	4.9
MSS1514V-473MED	47 $\pm$ 20%	0.038	7.3	4.7	5.3	5.9	3.0	3.9
MSS1514V-104KED	100 $\pm$ 10%	0.064	5.0	3.2	3.7	4.0	2.4	3.1
MSS1514V-224KED	220 $\pm$ 10%	0.152	3.0	2.2	2.5	2.7	1.6	2.2
MSS1514V-474KED	470 $\pm$ 10%	0.278	2.3	1.5	1.7	1.9	1.2	1.7
MSS1514V-105KED	1000 $\pm$ 10%	0.630	1.5	1.0	1.2	1.3	0.80	1.1

1. Please specify **termination** code:

**MSS1514V-105KED**

**Tolerance:** K = 10%, M = 20%

**Termination:** E = RoHS compliant matte tin over nickel over phos bronze. Special order:

Q = RoHS tin-silver-copper (95.5/4/0.5) or

P = non-RoHS tin-lead (63/37).

**Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (175 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4263B LCR meter or equivalent.

3. DCR measured on a micro-ohmmeter and a Coilcraft CCF858 test fixture.

4. SRF measured using an Agilent/HP 8753D network analyzer and a Coilcraft SMD-D test fixture.

5. DC current at 25°C that causes the specified inductance drop from its value without current.

[Click for temperature derating information.](#)

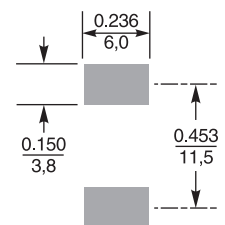
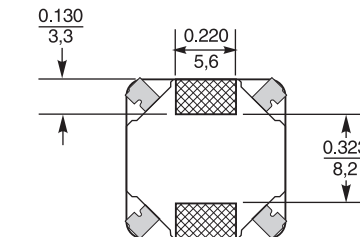
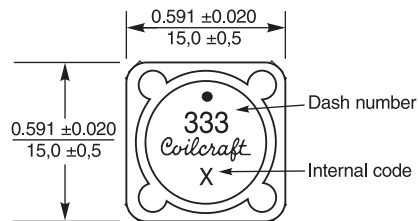
6. Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.

[Click for temperature derating information.](#)

7. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Dimensions are in inches mm

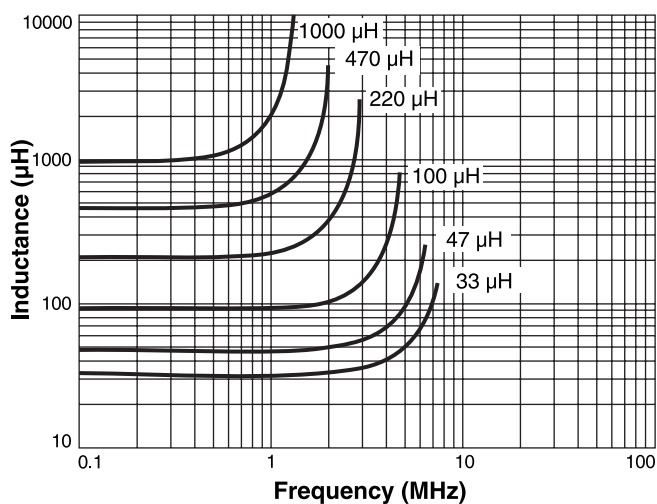


**Recommended Land Pattern**

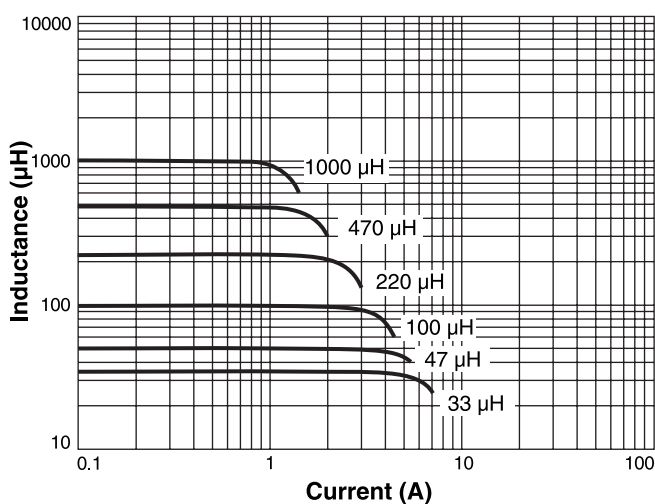


# SMT High Voltage Power Inductors – MSS1514V Series

## Typical L vs Frequency



## Typical L vs Current



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