# **AMELA2012S MOLDED INDUCTOR**

Request Samples 🕥

#### **FEATURES**

- Shielded construction
- Soft saturation
- High efficiency
- Designed for switching frequencies between 100KHz-5MHz
- Automotive option available upon request

# **ELECTRICAL SPECIFICATIONS @ 25°C**

PART NUMBER*			IRMS	ISAT	DC RESISTANCE (mΩ)		ТҮРЕ
	(uH)	(%)	(A)	(A)	TYP	MAX	
AMELA2012S-R22MT	0.22	20	10.0	8.5	11	13	Lead Frame
AMELA2012S-R33MT	0.33	20	5.8	7.0	15	16.5	Lead Frame
AMELA2012S-R47MT	0.47	20	4.8	6.0	20	25	Lead Frame
AMELA2012S-R68MT	0.68	20	3.9	4.6	30	34	Lead Frame
AMELA2012S-1R0MT	1.0	20	3.7	4.3	38	45	Lead Frame
AMELA2012S-1R5MT	1.5	20	2.9	3.0	53	60	Lead Frame
AMELA2012S-2R2MT	2.2	20	2.4	2.7	78	90	Lead Frame

\* Please refer to Part Identification section

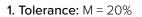
#### **Test Conditions**

Inductance: 1 MHz, 1 V, 0 Adc Humidity Range: 65% RH Temperature Rise Current: Current measured at  $\Delta$  T of 40°C Saturation Current: Current measured at  $\Delta$  L of 30%

## PART BUILDER



Series



2. Packaging: B = Bulk

Μ

Tol.<sup>1</sup>

1R0

Inductance\*

T = Tape and Reel (3,000pcs/reel)

Т

Packaging<sup>2</sup>

\*Refer to Electrical Specification table

# GENERAL SPECIFICATIONS

**Operating Temperature:** -55°C to +125°C with (40°C rise) Irms current.

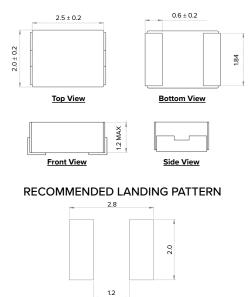
Maximum Part Temperature: +125°C Components Storage Temperature: -55°C to +125°C Tape and Reel Packaging

Temperature: -20°C to +65°C MSL: Level 1

# MATERIALS

Core:Metal AlloyWire:CopperTerminal:Tin PlatingInk:Black

# **PRODUCT DIMENSIONS**



Dimensions: mm





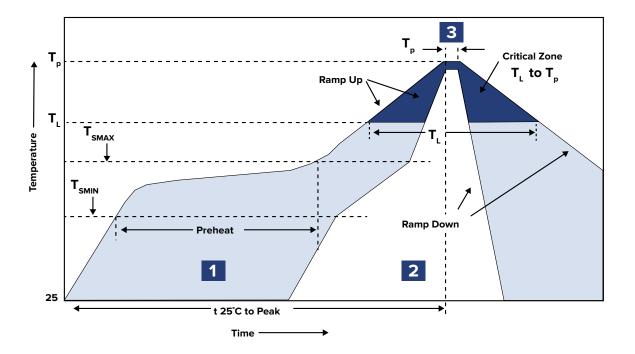
ISO

9001:2015 CERTIFIED

ABRACON



### **RECOMMENDED REFLOW PROFILE**



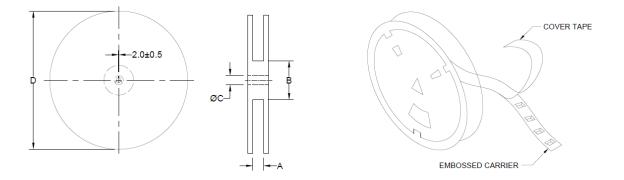
ZONE	DESCRIPTION	TEMPERATURE	TIMES
1	Preheat	T <sub>smin</sub> <sup>∼</sup> T <sub>smax</sub> 150°C <sup>∼</sup> 180°C	60 ~ 120 sec.
2	Reflow	Τ <sub>∟</sub> 230°C	30 ~ 40 sec.
3	Peak Heat	Т <sub>Р</sub> 250°С+0/-5°С	10 sec. MAX



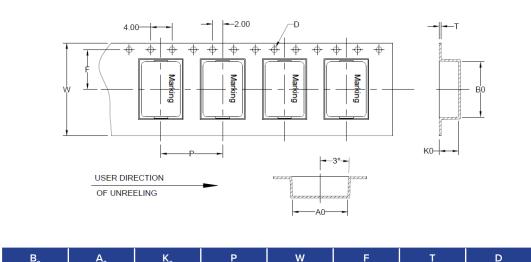


#### PACKAGING

Tape and Reel:	3,000
Units per Carton:	144,000
T&R per Carton:	48
Weight per Carton:	6.3 kg
Weight per Unit:	0.06 g
Carton Dimensions:	450 x 380 x 210 mm



ТҮРЕ	А	В	С	D
7" x 8 mm	9.7 ± 0.5	$50.0 \pm 0.5$	13.0 ± 0.1	183 ± 3.0



Dimensions: mm

This product is commercial off-the-shelf (COTS) and not specifically designed for automotive, military, aviation, aerospace, implantable, life-dependent medical or safety applications. This product is not recommended for use in any application requiring high reliability in which component failure could result in loss of life and/or property damage without prior written approval from Abracon. Specifications are subject to change without notice. Contact Abracon for more information.

2.85 ± 0.1 2.4 ± 0.1 1.35 ± 0.05 4.0 ± 0.1 8.0 ± 0.1



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3.5 ± 0.1 0.25 ± 0.03

1.5