

Product Portfolio – SMTLVR series

- **SMTLVR- Molding Type TLVR**

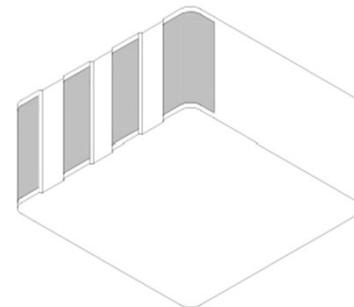
Features-

- **SMTLVR** Series Molding Type Carbonyl powder
- Low profile and low DCR.
- Operating temperature: -55°C~+125°C.
- Shielded construction.
- Handles high transient current spikes without saturation.
- Frequency range up to 3MHz.
- Ultra Low buzz noise, due to composite construction.

Test Noted-

- 1). All test data is referenced to 25°C ambient.
- 2). Test Condition: 100KHz, 1.0Vrms.
- 3). Isat: DC current at which the inductance drops approximate 30% TYP from its value without current.
- 4). Irms: DC current that causes the temperature rise ($\Delta T = 40^\circ\text{C}$) from 25°C ambient.

- 5). **Absolute maximum voltage 30VDC**



CIRCUIT DIAGRAM



Product Portfolio – SMTLVR series

Part No.	OCL	Inductance	DC Resistance		Saturation Current		Heating Rating Current	
		L (μ H) \pm 20%	DCR (m Ω)		Isat (A) Typ.		Irms (A)	
		@100KHz, 1.0V	Max.	Typ.	Max.	Typ.	Max.	Typ.
SMTLVR1050-R10MT	1-4	0.10	0.165	0.150	110	125	65	70
	2-3	0.10	0.165	0.150	110	125	32	36
SMTLVR11060-R10MT	1-4	0.10	0.150	0.100	75	87	64	72
	2-3	0.10	0.410	0.350	75	87	38	41

1. Absolute maximum voltage **30VDC** In production process test @100VDC Impulse Winding

Product Portfolio – SACE Core assembly series

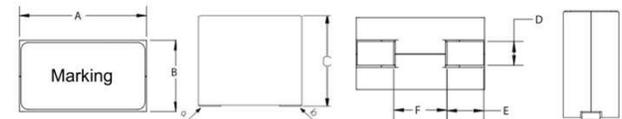
• SACE- Ferrite Core assembly Types

Features-

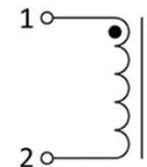
- SACE EE Core assembly Series
- High saturation characteristic core for large saturation current and low loss
- Closed magnetic circuit design reduces leakage flux
- High precision DCR
- Halogen Free & ROHS compliant

Test Noted-

1. All test data is referenced to 25°C ambient
2. Operating temperature range -40°C to +125°C
3. Irms: DC current that causes the temperature rise ΔT from 25°C ambient when two coils connected in series, ΔT is approximate 40°C
4. Isat: DC current at which the inductance drops approximate 20% from its value without current



SCHEMATIC



NO	ITEM	MATERIAL
1	Core	Ferrite Core
2	Clip	Cu/Sn Clip
3	Ink	Black Ink(Resin)
4	Adhesive	Epoxy

Product Portfolio – SACE Core assembly series

Part No.	Inductance	DC Resistance	Saturation Current		Heating Rating Current
	L (μ H) \pm 20%	DCR (m Ω)	Isat (A) Typ.		Irms (A) Typ.
	@100KHz, 1.0V	(at 25 \pm 5 $^{\circ}$ C)	25 $^{\circ}$ C	100 $^{\circ}$ C	25 $^{\circ}$ C
SACE070711B-R055MT	0.055	0.145 \pm 10%	155	130	76
SACE070711B-R070MT	0.07	0.145 \pm 10%	134	114	76
SACE070711B-R10MT	0.10	0.145 \pm 10%	93	76	76
SACE070711B-R12MT	0.12	0.145 \pm 10%	76	65	76
SACE070711B-R15MT	0.15	0.145 \pm 10%	60	51	76
SACE070711B-R22MT	0.22	0.145 \pm 10%	42	35	76
SACE070711B-R33MT	0.33	0.145 \pm 10%	28	22	76

Product Portfolio – SACE Core assembly series

Part No.	Inductance	DC Resistance	Saturation Current		Heating Rating Current
	L (μ H) \pm 20%	DCR (m Ω)	Isat (A) Typ.		Irms (A) Typ.
	@100KHz, 1.0V	(at 25 \pm 5 $^{\circ}$ C)	25 $^{\circ}$ C	100 $^{\circ}$ C	25 $^{\circ}$ C
SACE090510L-R10MT	0.10	0.125 \pm 5%	80	70	63
SACE090510L-R12MT	0.12	0.125 \pm 5%	70	60	63
SACE090510L-R15MT	0.15	0.125 \pm 5%	56	48	63

Product Portfolio – SACE Core assembly series

Part No.	Inductance	DC Resistance	Saturation Current		Heating Rating Current
	L (μ H) \pm 15%	DCR (m Ω)	Isat (A) Typ.		Irms (A) Typ.
	@100KHz, 1.0V	Max.	25°C	100°C	25°C
SACE090610L-R10LT	0.10	0.12	93	74	84
SACE090610L-R12LT	0.12	0.12	70	60	84
SACE090610L-R15LT	0.15	0.12	55	48	84
SACE090610L-R18LT	0.18	0.12	46	40	84
SACE090610L-R22LT	0.22	0.12	38	33	84

Product Portfolio – SACE Core assembly series

Part No.	Inductance	DC Resistance	Saturation Current		Heating Rating Current
	L (μH) $\pm 15\%$	DCR ($\text{m}\Omega$)	Isat (A) Typ.		Irms (A) Typ.
	@100KHz, 1.0V	Max.	25°C	100°C	25°C
SACE090610B-R10LT	0.10	0.12	110	90	84
SACE090610B-R12LT	0.12	0.12	90	75	84
SACE090610B-R15LT	0.15	0.12	67	58	84
SACE090610B-R18LT	0.18	0.12	56	49	84
SACE090610B-R22LT	0.22	0.12	46	40	84

Product Portfolio – SACE Core assembly series

Part No.	Inductance	DC Resistance	Saturation Current		Heating Rating Current
	L (μ H) \pm 15%	DCR (m Ω)	Isat (A) Typ.		Irms (A) Typ.
	@100KHz, 1.0V	Max.	25°C	100°C	25°C
SACE090610F-R10LT	0.10	0.12	93	74	84
SACE090610F-R12LT	0.12	0.12	70	60	84
SACE090610F-R15LT	0.15	0.12	55	48	84
SACE090610F-R18LT	0.18	0.12	46	40	84
SACE090610F-R22LT	0.22	0.12	38	33	84

Product Portfolio – SACE Core assembly series

Part No.	Inductance	DC Resistance	Saturation Current		Heating Rating Current
	L (μ H) \pm 20%	DCR ($m\Omega$)	Isat (A) Typ.		Irms (A) Typ.
	@100KHz, 1.0V	Max.	25°C	100°C	25°C
SACE100612L-R080MT	0.08	0.125	130	130	84
SACE100612L-R090MT	0.09	0.125	130	117	84
SACE100612L-R10MT	0.10	0.125	125	105	84
SACE100612L-R12MT	0.12	0.125	105	88	84
SACE100612L-R15MT	0.15	0.125	83	70	84

Product Portfolio – SACE Core assembly series

Part No.	Inductance	DC Resistance	Saturation Current		Heating Rating Current
	L (μ H) \pm 20%	DCR (m Ω)	Isat (A) Typ.		Irms (A) Typ.
	@100KHz, 1.0V	Max.	25°C	100°C	25°C
SACE100710L-R10MT	0.10	0.170	135	100	68
SACE100710L-R12MT	0.12	0.170	107	80	68
SACE100710L-R15MT	0.15	0.170	92	75	68
SACE100710L-R22MT	0.22	0.170	62	47	68