

Automotive Application



Resistor, Capacitor

IATF16949, AEC-Q200, VDA6.3,
RoHS, Zero-defect



Automotive Grade Chip Resistors

	Series	PN	Product	Size	Power	Tolerance	Resistance	TCR/PPM		
Thick Film Automotive	Resistor Array	CNF22.A		0402*2	1/16W	±1%, ±5%	0Ω, 1Ω~1MΩ	±200		
		CNF42.A		0402*4			0Ω, 1Ω~10MΩ			
		CNF43.A		0603*4			1/10W, 1/8W			
	Resistor Array	AS-21.A		0201*2	1/32W	±5%	±1%, ±5%	3Ω~9.1Ω	±300	
		AS-21.A		0201*2	1/32W					
		AS-41.A		0201*4	1/32W					
		AS-42.A		0402*4	1/16W					
		AS-43.A		0603*4	1/10W					
	Wide Terminal	CRW25.A		1225	2W, 3W	±0.5%, ±1%, ±5%	±0.5%, ±1%, ±5%	0Ω, 1Ω~1MΩ	±100/1±50/±200	
		CRW20.A		1020	1.5W, 2W					
		CRW62.A		0612	1W, 1.5W					
		CRW08.A		0508	0.75W, 1W					
	Pulse Withstanding	PWR02.A		0402	1/5W	±0.5%, ±1%, ±5%	±0.5%, ±1%, ±5%	1Ω~1MΩ	±100/±200/±300	
		PWR03.A		0603	1/10W, 1/4W, 1/3W					
		PWR05.A		0805	1/8W, 2/5W, 1/2W					
		PWR06.A		1206	1/3W, 1/2W, 3/4W					
		PWR13.A		1210	1/2W, 3/4W					
		PWR10.A		2010	3/4W, 1W, 1.25W					
		PWR12.A		2512	1.5W, 2W					
	Surge Withstanding	SWR02.A		0402	1/5W	±5%, ±10%, ±20%	±5%, ±10%, ±20%	1Ω~1MΩ	±100/±200/±300	
		SWR03.A		0603	1/8W, 1/4W					
		SWR05.A		0805	1/4W, 2/5W, 1/2W					
		SWR06.A		1206	1/3W, 1/2W, 3/4W					
		SWR13.A		1210	1/2W, 3/4W					
		SWR10.A		2010	3/4W, 1W					
		SWR12.A		2512	1.5W, 2W					
	High Voltage	HVR02.A		0402	1/16W, 200V	±1%, ±5%	±1%, ±5%	39KΩ~100MΩ	±100, ±200, ±400	
		HVR03.A		0603	1/10W, 400V			56KΩ~100MΩ		
		HVR05.A		0805	1/8W, 800V			100KΩ~100MΩ		
		HVR06.A		1206	1/4W, 1000V			51KΩ~100MΩ		
		HVR0A.A		2010	1/2W, 3000V			30KΩ~100MΩ		
		HVR12.A		2512	1W, 4000V			100KΩ~500MΩ		
High Voltage Low VCR	HVRC06		1206	1/3W, 1500V	±0.5%, ±1%, ±5%	±0.5%, ±1%, ±5%	51KΩ~500MΩ	±100, VCR<25		
	HVRC0A		2010	1/2W, 3000V			30KΩ~500MΩ			
	HVRC12		2512	1W, 4000V			30KΩ~500MΩ			
Metal Strip / Metal Foil Automotive	Metal Foil Low Ohm	MF03.A		0603	1/4W, 1/3W, 1/2W	±1%, ±2%, ±5%	5mΩ~20mΩ	±50/±100±/200		
		MF05.A		0805	1/4W, 1/3W, 1/2W		3mΩ~47mΩ			
		MF06.A		1206	1/2W, 1W		3mΩ~56mΩ			
		MF10.A		2010	1W		3mΩ~100mΩ			
		MF12.A		2512	1W, 2W		2mΩ~200mΩ			
	High power Metal Strip	LRP06.A		1206	1W	±0.5%, ±1%, ±5%	±0.5%, ±1%, ±5%	3mΩ~40mΩ	±50/75/100	
		LRP10.A		2010	1W, 2W			4mΩ~100mΩ		±75
		LRP12.A		2512	2W, 3W			3mΩ~200mΩ		±25/50/75















Capacitor (Automotive)

	Series	PN	Product	Size	Power	Tolerance	Resistance	TCR/PPM
Capacitor (Automotive)	Multilayer	MCF01.A		0201	6.3V~50V	±0.05/0.1pF ±0.5pF, ±1%~±5%, ±10%~20%, +80/20%	NPO /X7R	NPO/X7R/X7S/X5R 0.1pF~22uF
		MCF02.A		0402	10V~50V			
		MCF03.A		0603	6.3V~250V			
		MCF05.A		0805	6.3V~630V			
		MCF06.A		1206	6.3V~2000V			
		MCF10.A		1210	6.3V~2000V			
		MCF08.A		1808	6.3V~3000V			
		MCF12.A		1812	6.3V~3000V			

Chip Inductor

	Product	Process	PN	Product	Size	Inductance	Tol	IDC	DCR		
Ceramic	RF Inductor	Multilayer	CL01-SA		0201	0.3nH~18nH	±0.1nH~±0.3nH, ±2~±5%, ±10%	200mA-850mA	0.07Ω~0.9Ω		
			CL02-SA		0402	0.3nH~100nH		200mA-1000mA	0.08Ω~1.6Ω		
			CL03-SA		0603	1.0nH~120nH		300mA-1000mA	0.05Ω~1.2Ω		
		Wire-wound	WL02GA		0402	1nH~120nH	±10%~±5%	30mA-1.36A	0.045Ω~2.2Ω		
			WL03GA		0603	1.6nH~470nH		75mA-700mA	0.04Ω~7Ω		
			WL05GA		0805	2.2nH~2200nH		150mA-800mA	0.03Ω~4.2Ω		
Power Inductor	Common Mode Filter	Multilayer	CMX04W.A		0504	67Ω/90Ω	±20%	300mA	0.5Ω~0.6Ω		
			CMX05W.A		0805	67Ω/90Ω/120Ω/160Ω/180Ω/220Ω		300mA-400mA	0.4Ω~0.5Ω		
		Wire-wound	CFH10.A		1210	300Ω/500Ω/1000Ω/2200Ω	+50/-30%	150mA-300mA	0.4~1.5Ω		
			CFH12.A		1812	300Ω/500Ω/1000Ω/2000Ω		230mA-360mA	0.6~2Ω		
	Power Inductor	Power Inductor	Wire-wound	SDA.A		0603	0.18uH~4.5uH	±20%	8A-36A	1.75Ω~25.3Ω	
				SDE.A		0420HP	1uH~10uH		±20%	2.3A-8.5A	27mΩ~243mΩ
				SDE.A		0530HP	1uH~10uH		±20%	4A-12A	13.7mΩ~130mΩ
				SDE.A		0630HP	1uH~22uH		±20%	3.5A-22A	10mΩ~190mΩ
				SDE.A		0650HP	1uH~22uH		±20%	5.5A-20A	6.5mΩ~170mΩ
				SDE.A		1040HP	1uH~47uH		±20%	4.5A-36A	3.3mΩ~167mΩ
				SDE.A		1050HP	1uH~47uH		±20%	6.5A-30A	3.5mΩ~145mΩ
				SDE.A		1265HP	1uH~47uH		±20%	9.5A-48A	2.3mΩ~90mΩ
	SDE.A	1770HP	1uH~47uH	±20%	9.5A-60A	2mΩ~55mΩ					
	Bead	Bead	Multilayer	CBM.A		0402/0603/0805/ 1204/1210/1808	70Ω~2500Ω	±25%	50mA-6A	0.15Ω~1.4Ω	

Automotive Grade Chip Resistors

	Series	PN	Product	Size	Power	Tolerance	Resistance	TCR/PPM
Thin Film Automotive	Thin Film Precision NiCr	AR02.A		0402	1/16W	±0.05%~0.1%~±1%	49.9Ω~100KΩ	±5/10/15/25/50
		AR03.A		0603	1/16W, 1/10W		10Ω~332KΩ	
		AR05.A		0805	1/10W, 1/8W		10Ω~1MΩ	
		AR06.A		1206	1/8W, 1/4W			
		AR13.A		1210	1/4W, 1/3W			
		AR10.A		2010	1/4W, 1/3W			
		AR12.A		2512	1/2W			
	Thin Film Precision TaN	TAR02		0402	1/16W	±0.05%~0.1%~±1%	40Ω~35KΩ	±10/15/25/50
		TAR03		0603	1/6W		40Ω~130KΩ	
		TAR05		0805	1/5W		10Ω~350KΩ	
		TAR06		1206	1/2W		10Ω~1MΩ	
	Metal Thin Film Precision	ARM02.A		0402	1/32W, 1/16W, 1/8W	±0.02%~0.1%~±0.5%	10Ω~150KΩ	±5/10/25/50
		ARM03.A		0603	1/16W, 1/10W, 1/6W		10Ω~1MΩ	
		ARM05.A		0805	1/10W, 1/8W, 1/4W		10Ω~2.7MΩ	
		ARM06.A		1206	1/8W, 1/4W		10Ω~5.1MΩ	
	Professional High Temp 175C	ART02.A		0402	1/10W	±0.1%~±1%	49.9Ω~221KΩ	±25/50
		ART03.A		0603	3/20W		10Ω~511KΩ	
		ART05.A		0805	1/5W		1Ω~1MΩ	
		ART06.A		1206	2/5W			
	High power / Temp 175C	ARTP02.A		0402	1/5W	±0.1%~±1%	47Ω~100KΩ	±25/50
		ARTP03.A		0603	1/4W		10Ω~100KΩ	
		ARTP05.A		0805	2/5W		10Ω~100KΩ	
	High Voltage	ARHV05.A		0805(900V)	1/5W	±0.1%~±1%	180KΩ~1MΩ	±25/50
		ARHV06.A		1206(1400V)	1/4W		160KΩ~2MΩ	
		ARHV13.A		1210(2000V)	1/3W		121K~3.01MΩ	
	MELF Metal Film Precision	CSRA0102		0102	1/5W, 0.3W	±0.1%~±5%	0Ω, 1Ω~1MΩ	±5/±10/±15/±25/±50/±100
		CSRA0204		0204	1/4W, 2/5W		0Ω, 0.1Ω~10MΩ	
		CSRA0207		0207	1/2W, 1W			
High Voltage	CSRP0204		0204	2/5W, 500V	±0.1%~±1%	340KΩ~10MΩ	±25/50	
	CSRP0207		0207	1W, 1000V				
Thick Film Automotive	Thick Film Low TC Current Sensing	CS02.A		0402	1/16W, 1/8W	±1%, ±2%, ±5%	50mΩ~1Ω	±100~±400
		CS03.A		0603	1/10W, 1/8W, 1/5W		20mΩ~1Ω	
		CS05.A		0805	1/8W, 1/4W, 1/2W		10mΩ~1Ω	
		CS06.A		1206	1/4W, 1/2W			
		CS13.A		1210	1/2W, 3/4W			
		CS10.A		2010	3/4W, 1W			
		CS12.A		2512	1W, 1.5W, 2W			
		CS25.A		1225	3W			3mΩ~8Ω
		CS37.A		3720	1W		10mΩ~500mΩ	
	CS75.A	7520	2W	1mΩ~350mΩ				
	General Thick Film	CR-01.A		0201	1/20W	±0.5% ±1%, ±5%	0Ω, 1Ω~10MΩ	±100/±200
		CR-02.A		0402	1/16W, 1/8W			
		CR-03.A		0603	1/10W, 1/4W			
		CR-05.A		0805	1/8W, 1/3W			
		CR-06.A		1206	1/4W, 1/2W			
		CR-10.A		1210	1/2W			
		CR-12.A		2010	3/4W, 1W			
	High Precision	CRTC02A		0402	1/16W, 1/8W	±0.1%~±1%	300Ω~1MΩ	±25
		CRTC03A		0603	1/10W, 1/5W			
		CRTC05A		0805	1/8W, 1/4W			
		CRTC06A		1206	1/4W, 1/3W			
				2010	3/4W, 1W			
	Thick Film Green Parts Lead Free	CRG02.A		0402	1/16W	±1%, ±5%	0Ω, 1Ω~10MΩ	±100/±200
		CRG03.A		0603	1/10W			
		CRG05.A		0805	1/8W			
		CRG06.A		1206	1/4W			
		CRG10.A		1210	1/3W			
		CRG0A.A		2010	3/4W			
CRG12.A		2512		1W				
Anti-Sulfur	AS01.A		0201	1/20W	±0.5% ±1%, ±5%	0Ω, 1Ω~10MΩ	±100, ±200	
	AS02.A		0402	1/16W				
	AS03.A		0603	1/10W				
	AS05.A		0805	1/8W				
	AS06.A		1206	1/4W				
	AS10.A		1210	1/3W				
	AS0A.A		2010	3/4W				
AS12.A	2512	1W						
Anti-Sulfur Green Lead Free	ASG02.A		0402	1/16W, 1/10W	±0.5% ±1%, ±5%	0Ω, 1Ω~10MΩ	±100, ±200	
	ASG03.A		0603	1/10W, 1/4W				
	ASG05.A		0805	1/8W, 1/3W				
	ASG06.A		1206	1/4W, 1/2W				
	ASG10.A		1210	1/3W, 3/4W				
	ASG0A.A		2010	3/4W, 1W				
	ASG12.A		2512	1W, 1.5W				
Resistor Array	CN-21.A		0201*2	1/32W	±1%, ±5%	3Ω~9.1Ω	±300	
	CN-21.A		0201*2	1/32W				
	CN-41.A		0201*4	1/32W		0Ω, 10Ω~1MΩ	±200	
	CN-42.A		0402*4	1/16W				
	CN-43.A		0603*4	1/10W				

About Viking

Viking Tech was established in 1997, Taiwan, as the leader in the design, manufacturing and marketing of Thin-Film /Thick-Film /Multilayer /Wirewound Resistors, Capacitors, Inductors.

Your reliable partner, well-experienced in the design of innovative components, offering excellent products to the Global customers. A professional manufacturer for miniature, precision, High power, Ultra stability passive components.



1997-2011

Established & Expanded

- 1997 Established for Integrated Passive Devices. Thin Film Foundry Service OEM/ODM.
- 2002 Acquired Chip Resistor Company (TMTEC) ISO9001/14001, TS16949 Certificated, MELF Resistor



2011-2016

Go on Public

- Viking Tech go on Public in Taiwan.
- Set up Viking Tech America Corporation
- Expansion Hsin chu Factory II



2016-2019

Automotive Market

- Automotive market (IATF16949 Certificated)
- Factory in Taiwan were all processed VDA 6.3



2020-2022

Medical Market

- Medical market (ISO13485 approved)
- Aggressively Extension for Thin Film, MELF, Thick Film Resistor production.
- MES (Manufacturing Execution System)



2022-2025

Thin Film Resistor

- More solutions for environment and future
- Keep developing new products to cover more niche market

Quality Assurance Automotive Grade

- ✓ IATF-16949 Certified Production Sites
- ✓ AEC-Q200 Compliance
- ✓ High Reliability with VDA6.3
- ✓ Certified with Equipment and Employees to Manufacture Automotive Products.
- ✓ Commitment to Provide Zero-Defect TASK Products
- ✓ PPAP Available.
- ✓ Insurance Available





Viking Tech Corp.

www.viking.com.tw
Email: sales@viking.com.tw

Taiwan, Hsin Chu Headquarter
TEL: 886-3-5972931

Taiwan, Kaohsiung Branch
TEL: 886-7-8217999

USA, CA office

Email: sales@vikingamerica.com
TEL: 1-949-398-5228

China Office

Dong Guan Office
TEL: 86-769-82026115

Shanghai Office
TEL: 86-21-5273113

Cheng Du Office
TEL: 86-137-95302908

China Wuxi Factory

Email: China@viking.com.tw
TEL: 86-510-85203339



Automotive Applications

- Wireless Charger
- PEPS (Keyless System)
- TPMS Module
- Window Lift, Mirror control
- Auto-control door
- Air Conditioning, HVAC
- Seat Heating, positioning
- Remote Start
- Temperature Sensor

- Cluster
- Navigator
- Gateway ECU
- Telematics Control Unit (TCU)
- Entertainment-Audio, TV, LCD...
- Satelite Radio

- View Camera ECU
- Laser Sensor
- Front Sensing Camera
- Ultrasonic Sensor
- mmWave Radar
- Parking Assistant

- Interior Lighting
- Rear & Signal lighting
- HID Lighting
- LED/ Lamp Driver
- Light sensor

- Inverter & Boost Converter
- Plug-In Batter charger
- DC DC Converter
- BMS (Battery Management System)
- Battery cell Temp Monitoring



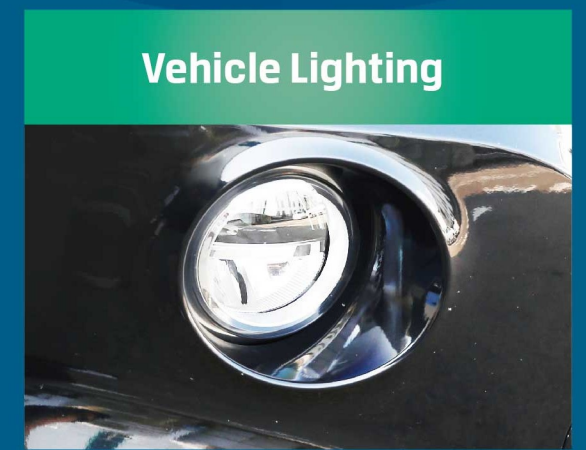
- Comfort & Positioning**
- CR.A Series** : Thick film High Power Resistor
 - AR..A/ART/ARTPA Series** : Thin Film Precision Resistor
 - CS/CSN.A Series** : Thick Film Current Sensing
 - LRP/MF.A Series** : Metal Strip Current Sensing
 - MCF.A Series** : Multilayer Chip Capacitor
 - PWR/SWR.A Series** : Pulse Resistor
 - SDA/SDE.A Series** : Power Inductor



- Infotainment / Entertainment Telematics**
- CR.A Series** : CR high power : Thick film Resistor
 - AR..A/ART/ARTPA Series** : Thin Film Precision Resistor
 - CS.A Series** : Thick Film Current Sensing
 - LRP/MF.A Series** : Metal Strip Current Sensing
 - MCF.A Series** : Multilayer Chip Capacitor
 - MC high Cap** : Multilayer Capacitor High Cap
 - WLGA, CLSA Series** : High frequency Inductor



- Advanced Driver Assistance Systems (ADAS)**
- CNF.A/TFAN Series** : Thick/Thin Film Resistor Array
 - SDA/SDE.A Series** : Power Inductor
 - MCF.A** : NPO/X7R/X5R /X7S Multilayer Chip Capacitor
 - LRP/MF.A Series** : Metal Strip Current Sensing



- Vehicle Lighting**
- CR..A Series, CR high power** : Thick film Resistor
 - AR..A/ART/ARTPA Series** : Thin Film Precision Resistor
 - CS/CSN..A Series** : Thick Film Current Sensing
 - LRP/MF.A Series** : Metal Strip Current Sensing
 - MCF..A Series** : NPO/X7R/X5R Multilayer Chip Capacitor ,Capacitor High Cap, High Voltage
 - MCFA Series** : Soft Termination capacitor
 - SDA/SDE.A Series** : Power Inductor
 - CSRA Series** : MELF Precision Resistor
 - PWR/SWR.A Series** : Pulse Resistor



- Electric Vehicle / Hybrid Vehicle**
- AS..A Series** : Thick film Anti-Sulfur Resistor
 - AR..A/ART/ARTPA/ARM.A Series** : Thin Film Precision Resistor
 - CS/CSN..A Series** : Thick Film Current Sensing
 - CR..A Series** : Thick Film Resistor
 - SWR.A Series** : Anti-Surge Thick Film Resistor
 - LRP/MF.A Series** : Metal Strip Current Sensing
 - CSRA /CSRP Series** : MELF Precision Resistor
 - CRW/CSW.A Series** : Long Side Resistor
 - LRS Series** : Shunt Resistor
 - MCF..A Series** : Multilayer Chip Capacitor