

#### History

#### 1950's~1960's

Awarded Commendation of the Minister of Commerce and Industry at the	23
6th 'Export Day' (amount of exports: \$220,000)	
Awarded President's Commendation for Contribution to Export and Industry	13
Begins Korea's first mass-production of ceramic capacitors (Supplies to	
GoldStar Co., etc.)	1.9
Begins mass-production of high-tension 40,000KVA capacitors (First supplier	59
to Korea Electric Power Corporation)	1.5
Exports Korea's first electrolytic capacitors to Japan (\$48,500)	
Changes the company name to Samwha Capacitor Industry Co.	9
Begins mass-production of high-tension 70,000KVA capacitors (First supplier	110
to Korea Electric Power Corporation)	9
Localizes radio parts for Dongnam Electronics	25
Begins Korea's first mass-production of high-tension 22,000V static	
capacitors (Supplies to Korea Electric Power Corporation)	13
Begins Korea's first mass-production of electrolytic / oil tubular capacitors	9
Begins Korea's first mass-production of capacitors for machinery (Supplies to	
GoldStart Co., Pungsung Electronics, KT)	.99
Begins Korea's first mass-production of Power capacitors (Supplies to Korea	Di
Electric Power Corporation)	
Launches technical partnership with Japan Capacitor Group	9
Changes company name to Samwha Electric	
Establishes Ohan Industry (CEO: Oh, Dongsun)	S
	Awarded President's Commendation for Contribution to Export and Industry Begins Korea's first mass-production of ceramic capacitors (Supplies to GoldStar Co., etc.) Begins mass-production of high-tension 40,000KVA capacitors (First supplier to Korea Electric Power Corporation) Exports Korea's first electrolytic capacitors to Japan (\$48,500) Changes the company name to Samwha Capacitor Industry Co. Begins mass-production of high-tension 70,000KVA capacitors (First supplier to Korea Electric Power Corporation) Localizes radio parts for Dongnam Electronics Begins Korea's first mass-production of high-tension 22,000V static capacitors (Supplies to Korea Electric Power Corporation) Begins Korea's first mass-production of electrolytic / oil tubular capacitors Begins Korea's first mass-production of capacitors for machinery (Supplies to GoldStart Co., Pungsung Electronics, KT) Begins Korea's first mass-production of Power capacitors (Supplies to Korea Electric Power Corporation) Launches technical partnership with Japan Capacitor Group Changes company name to Samwha Electric

#### 1970's

	' Mar.1979	Samwha Electric Co. is awarded 'Iron Tower Industry Medal' at the 13th Tax
		Day (No. 455)
	· Jul.1978	Develops material-mixture technology for small-type Ferrite Core for IFT
		production
	¹ Jun.1978	Begins mass-production of FBT Ferrite Core
-	· Jul.1977	Develops material-mixture technology for Antenna Ferrite Core production
	· Feb.1977	Begins Korea's first mass-production of DY. Ferrite Core (Supplies to
		Samsung Electronic Parts Co., Taihan Electric Wire Co., and GoldStar Inc.)
	* Jul.1976	Develops low-tension static capacitors of 480-380V class NF type / NG type
	· Jun.1976	Samwha Capacitor goes public
	' Apr.1976	Establishes Samwha Electronics Co., Ltd.
	· Nov.1974	Renames Samwha Nichicon to Samwha Electric Co., Ltd.
	* Dec.1973	Exceeds \$1,000,000 in export (begins exports to Australia and South African
		Republic)
	* Dec.1973	Establishes Samwha Nichicon
	· Jan.1973	Develops Korea's first Polg Rso Pgieme dielectric-applied NEF high-tension
		static capacitors
515	· Jan.1973	Develops Korea's first PCB nonflammable insulating oil translate applied
		static capacitors
	· Apr.1971	Awarded Commendation of the Minister of Commerce and Industry (for
		export)
	· Jul.1970	Awarded Commendation of the Prime Minister (for labor welfare and industry
		peace)
	· Mar.1970	Korea's first exporter of electrolytic/ceramic capacitors (Japan and Hong
		Kong)

## 1980's

· Sep.1989	Samwha Electric establishes Research Institute
· Apr.1989	Establishes Samwha Chemical Co., Ltd.
Nov.1988	Samwha Electric Co. awarded 'Iron Tower Prize for \$50,000,000 Export' at
	the 25th Export Day
• Jun.1988	Samwha Electronics establishes Research Institute
· May.1987	Samwha Electronics goes public
· Feb.1987	Samwha Capacitor establishes Research Institute
Nov.1986	Samwha Electric goes public
· Apr.1986	Establishes Korea JCC Co., Ltd.
Nov.1985	Samwha Electric Co. awarded 'Iron Tower Prize for \$20,000,000 Export' at
	the 22th Export Day
· Jun.1985	Begins mass-production of multilayer capacitors
· Apr.1985	Begins mass-production of Ferrite Core for VTR
· Feb.1985	Begins Korea's first mass-production of MLCC (Monoly Chip Multilayer
	Ceramic Capacitor) with original technology
· Oct.1983	Establishes Samwha Trading Co., Ltd.
· Oct.1981	Establishes Samwha Enterprise Co., Ltd.
· Jun.1981	Samwha Electric Co. awarded President's Commendation for Contribution to
	Industrial Development



## 1990's

0ct.1999	Begins mass-production of FT capacitors
Sep.1999	Begins mass-production of Chip Varistor
Aug.1999	Awarded the President's Medal for contribution to national industrial
	development through 100PPM quality innovation
Nov.1997	Establishes Samwha Thailand Co., Ltd.
Sep.1997	Establishes Samwha USA Inc.
Feb.1997	Establishes PT.SAMCON
Nov.1996	Awarded the President's Prize for \$100,000,000 Export
Nov.1996	Awarded Silver Prize in the National Quality Management Tournament
Dec.1995	Qingdao Samwha Electronics Wongun Agency
Mar.1995	Establishes Tianjin Samyoung International Trade Agency
Feb.1995	Daesung Electronics Industry renames Samwha Tecom
Feb.1994	Acquires Samwha Capacitor Group CI (and establishes the symbol)
Jun.1993	Establishes Tianjin Samwha Electric Co., Ltd.
May.1993	Acquires Daesung Electronics Industry Co.
Jun.1992	Establishes Samwon Industry
Mar.1991	Establishes PT. Samwha Indonesia
Nov.1990	Awarded President's Medal for Industry (No. 2295)
Jan.1990	Begins mass-production of EMI Filters

## 2000's

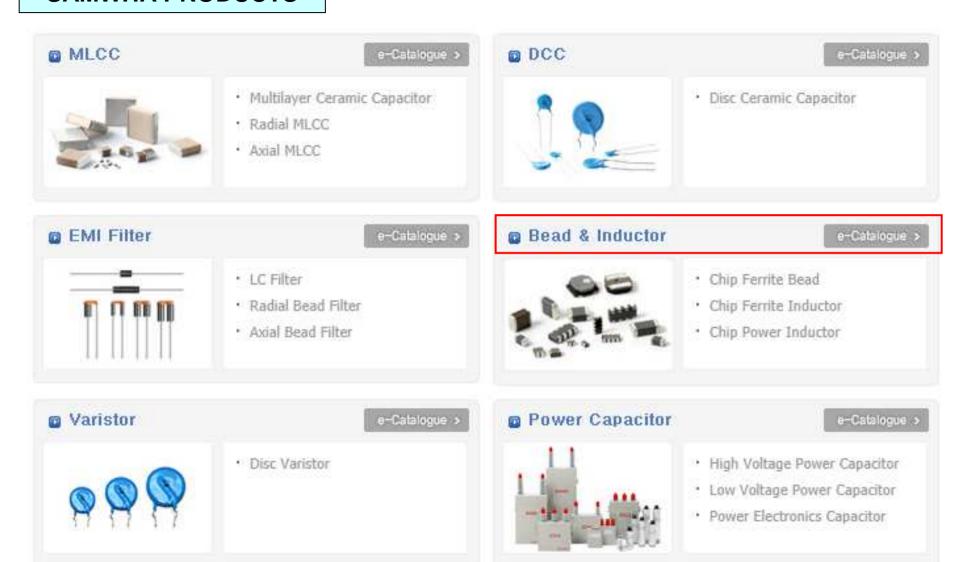
· Nov.2	2009 Esta	ablishes Samwha India Energy Savings Pvt. Ltd.
· Aug.2	2009 Esta	ablishes Samwha Hungary Kft.
· Aug.2	2007 Esta	ablishes Samwha Poland Sp. Z o.o.
• Mar.2	002 Esta	ablishes Samwha Hongkong Co., Ltd.
• May.2	2001 Esta	ablishes Samwha Europe GmbH
· Dec.2	000 Esta	ablishes Qingdao Samwha Electronics Co., Ltd.
· Apr.2	000 Beg	ins mass-production of Peaking Inductor
· Jan.2	000 Beg	ins mass-production of Chip Inductor

#### **COMPANY ADDRESS**

## Samwha Capacitor Group



## **SAMWHA PRODUCTS**



# **Chip Ferrite Beads**

## · Chip Ferrite Bead

Applications	Appearance	Series	Materials	Impedance [Ω]	Rated current [A]	e-Catalog
	<b>\$3</b> 3	CB1005G	A, K, J, M, V	5 - 1000	0.05 - 1.00	VIEW
e		CB1608G		5 - 1500	0.15 - 1.00	
For Signal Line		CB2012G		5 - 2000	0.15 - 1.00	
		CB3216G		35 - 1000	0.20 - 0.90	
	400	CB1608P	A, K, J, M, V	10 - 180	1.00 - 2.00	NIEW
For Power Line		CB2012P		11 - 2000	1.00 - 3.00	
		CB3216P		31 - 600	1.00 - 3.00	
	300	CB1608U	A, K, J, M, V		3.00 - 6.00	VIEW
For Ultra Power Line		CB2012U		30 - 120		
21170		CB3216U				

# → Chip Bead Array

Applications	Appearance	Series	Materials	Impedance [ $\Omega$ ]	Rated current [A]	e-Catalog
For Signal Line		CBA3216	A, K, J, M, V	30 - 1000	0, 10 - 0, 40	<b>VIEW</b>

# **Beads Filter/EMI series**

#### → Bead Filter

Applications	Appearance	Туре	Insulation [at DC 100v, MΩ]	Impedance $[\Omega]$	Rated current [A]	e-Catalog
For Signal Line	70	Radial	1.0	31 - 520	3.0 - 6.0	OIEM
For Signal Line	×	Axial	1.0	31 - 520	3.0 - 6.0	VIEW

#### > EMI Series

Applications	Appearance	Series	Circuit	Cut-off Frequency [Mt/]	DC Resistance max. [Ω]	Rated current max. [A]	Insulation Resistance min. [MΩ]	e-Catalog
For Signal Line	\$	CFL1608	T-type	30 - 150	1.0	100	100	VIEW

## ► EMI Series (Array)

Applications	Appearance	Series	Circuit	Cut-off Frequency [Mt]	DC Resistance max. [Ω]	Rated current max. [A]	Insulation Resistance min. [MΩ]	e-Catalog
For Signal Line	<b>THE</b>	CAL2010	Pi-type	50 - 400	1,0	100	100	VIEW