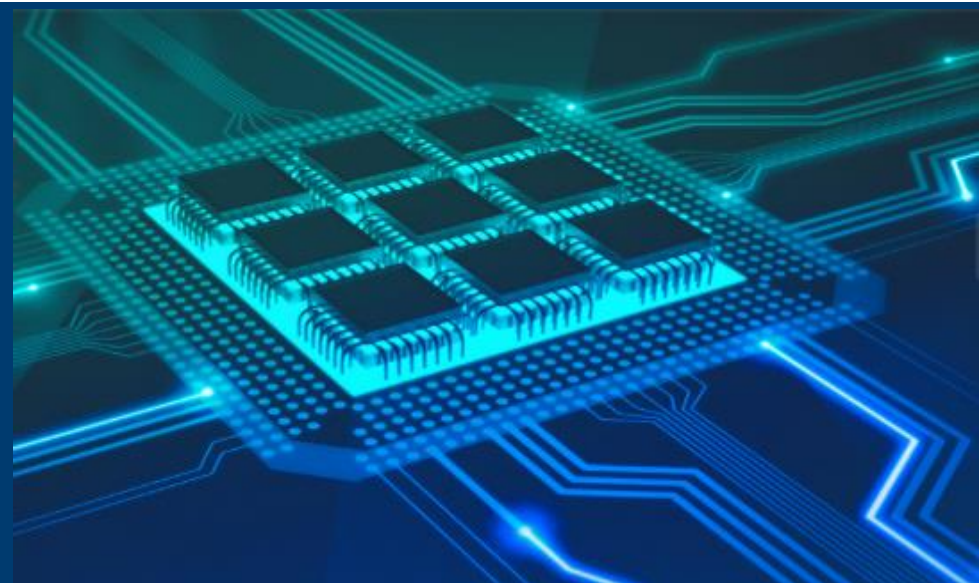
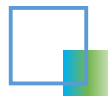


Doeshare Semiconductor Technology Company Profile



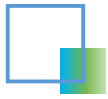


Company Background



Doeshare Semiconductor Technology Co., Ltd. was established in Shenzhen, China , by a group of world-renowned semiconductor design team and Taiwan experts in the field. This professional design team owns many feasible patents that strictly focus on the development of thyristor power semiconductors (TRIAC/SIDAC/SCR/TSS). As leading in the thyristor technology segment, we embedded OVP & DC circuit into one chip as system on chip that is yet to be done by other competitors. With vertical integration from IC design to manufacturing, we provide our customers the most reliable AC power solutions with thyristor semiconductor.

As the new energy vehicles, the IOTs, telecommunications, industrial control and smart-home applications are booming significantly year by year, the dynamic parametric characteristics, high-temperature performance and reliability requirements of thyristors become more vital and critical. Doeshare's products are competent or even out-level when comparing with some of the world-class leading manufacturers. Not only the thyristor, we are also aim to develop IGBT modules, MOSFET products and SSR in specific applications. We continue to strive, satisfy and eventually surpass our customers expectations.



Operating Distribution



Headquarters:

China Guangdong Shenzhen
Y1 Building No.12-13
Cultural And Creative Park
Bantian Street Longgang
District



Warehouse Center

Floor 4, Building B, Debaoli
Industrial Park, No. 312,
Jihua Road, Bantian Street,
Longgang District,
Shenzhen City, Guangdong
Province



Shanghai Office

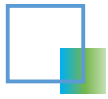
Room 310, Building 1,
Randong Business Center, No.
150, Lane 2161, Wanyuan
Road, Minhang District,
Shanghai



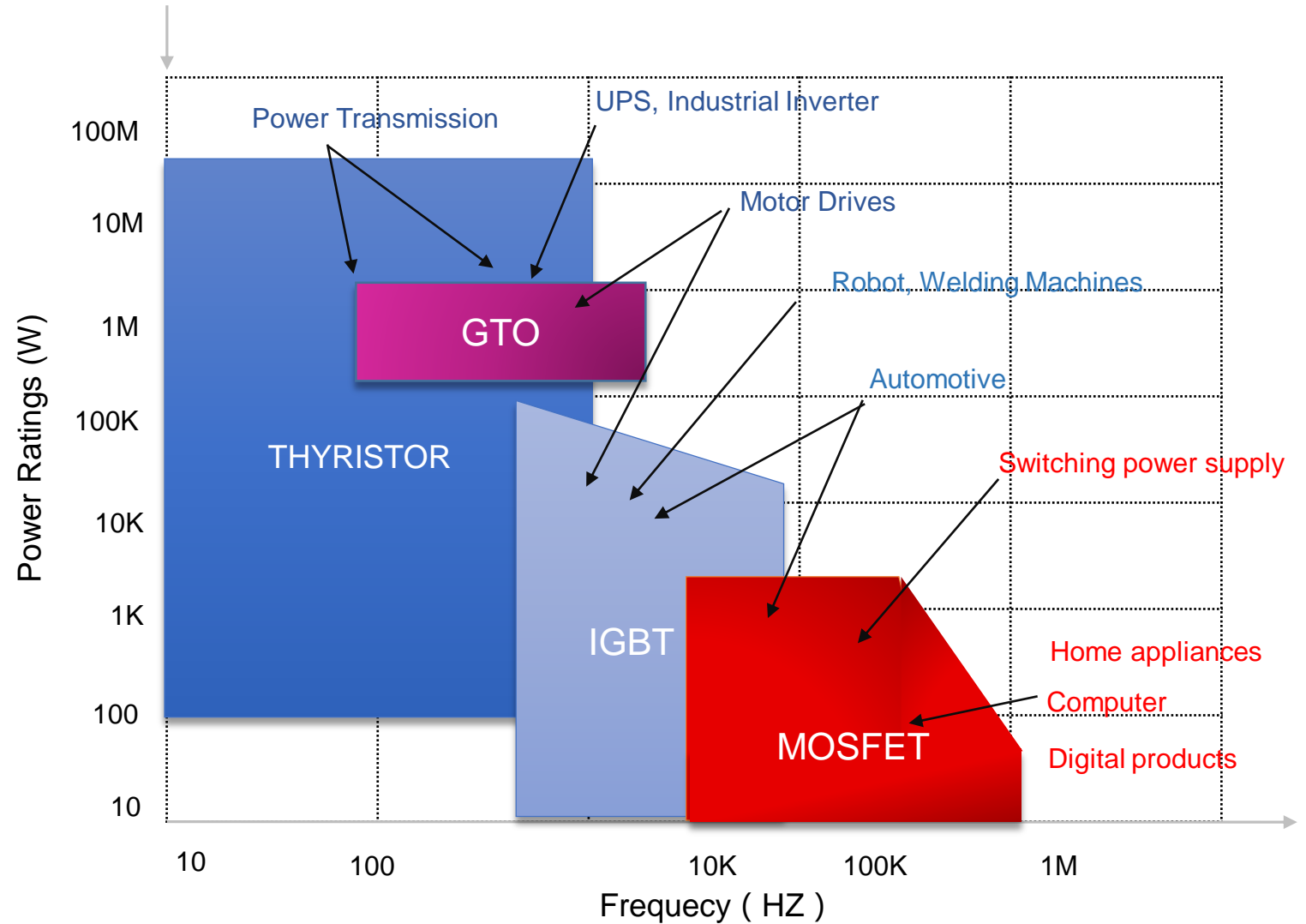
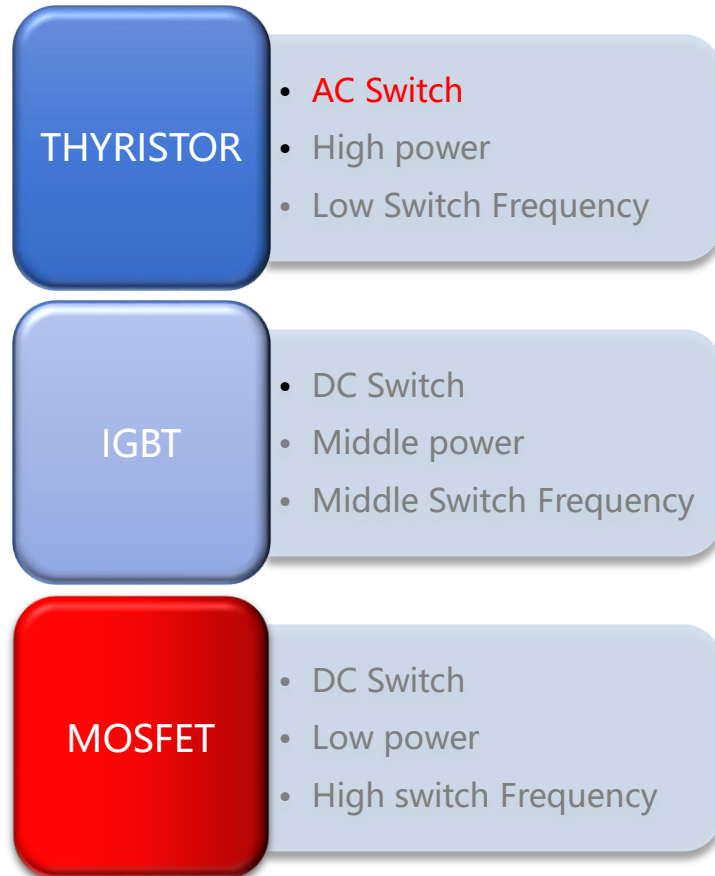
Zhongshan Office

Floor 6, Building 9, Tianrun
Shengxing Industrial Park,
Fusha Town, Zhongshan City



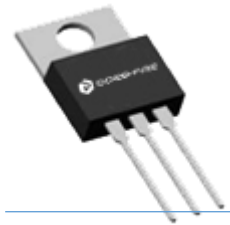


Application in Power Rating / Frequency



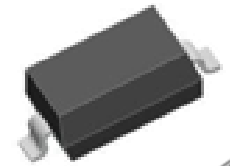


Our Products Structure



MOSFET

- P-Channel
- N-Channel



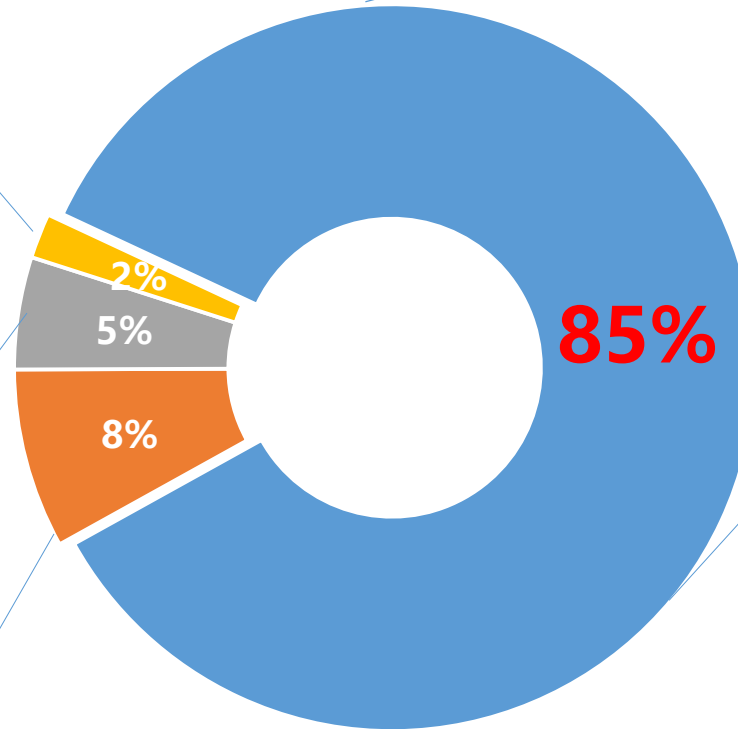
DIODE

- Witching
- Schottky
- TVS
- Zener
- ESD
- Rectifier

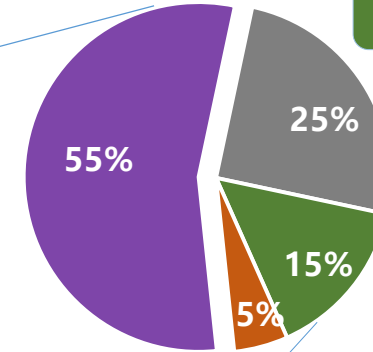


TRANSISTORS

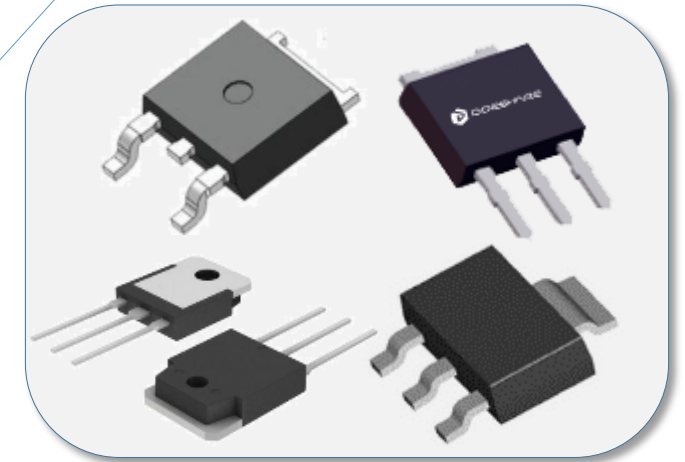
- General Purpose
- Witching
- Bias Resistor

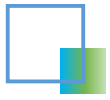


THYRISTOR



- TRIAC
- SCR
- SIDAC
- TSPD





Thyristor Function & Application

- AC motor control
- AC heater control
- AC power control
- AC lighting dimming

- Pulse generation
- Leakage protect
- AC power control

TRIAC

SCR

TSPD

SIDAC

- Surge Protection

- Pulse generation





产品特点及应用

Characteristic

Application

Package



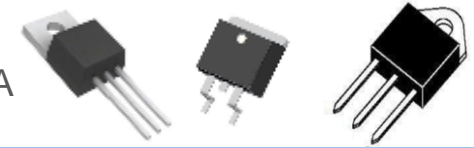
External gate control is required to send SCR or TRIAC conduction and control the conduction angle

Automotive Electronics, Industrial Control, Smart Home Appliances, Machine Tool Motors, Heaters, Solid State Relays

Motor, heater, brightness adjustment, flash, power, medical, load and other related electronic applications

Small AC charger, solid state relay, leakage sensing, LED dimmer, Motor control

SCR: 8-55A
TRIAC: 12-40A



SCR: 8-16A
TRIAC: 4, 8, 16A



SCR: 0.8-1.5A
TRIAC: 1-2A



With out external Gate connection, Self-triggered in one or both

Gas lamp lighting, gas igniter, negative ion generator, AC power transmitter

SIDAC: 0.3-1A



Surge Protection

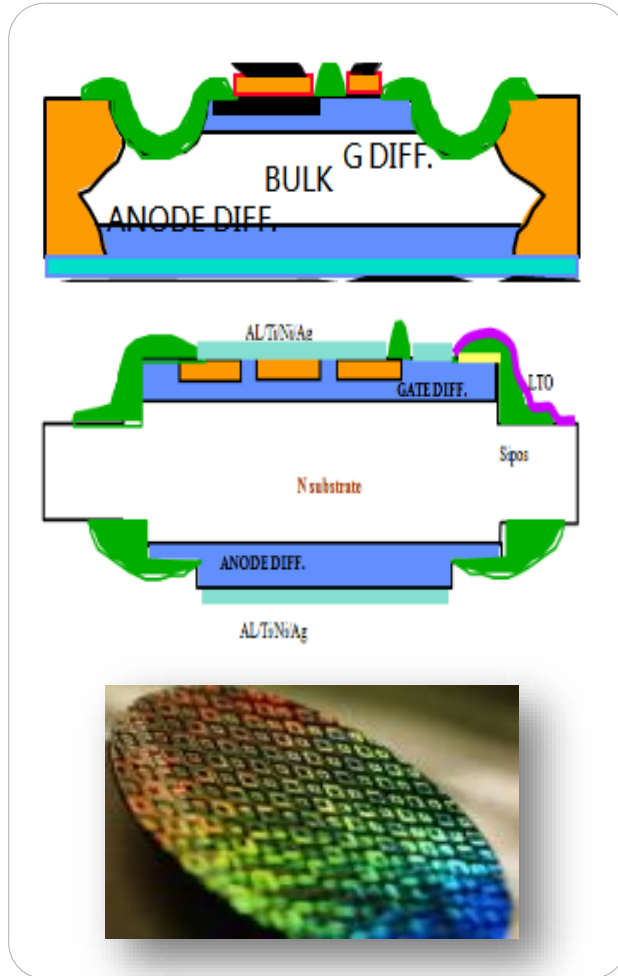
RJ45, Telecom, 56K modem, RS422...

TSPD Ipp 80 A ~ 100A





Outstanding AC control performance.

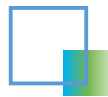


- PSH Tech, wide conduct range, high dynamic ability
- High precision & Very Low speed control without vibration & noise

- Reliability / Long life time
Reliability pass 500hr or 1000 hrs
- Support customer with stable quality request & best production yield

- Over 150°C
- Operation Temperature without SN
- Surpass abilities Same 125°C products

- I-SIM Tech, integration application & device design
- Reduce 75% time and cost in product development. More efficiency and cost effective
- Customize for customer design require



Benchmark (Device Competition case)

Thyristor TRIAC performance better than S* / N** on Temperature & Dynamic characteristics.

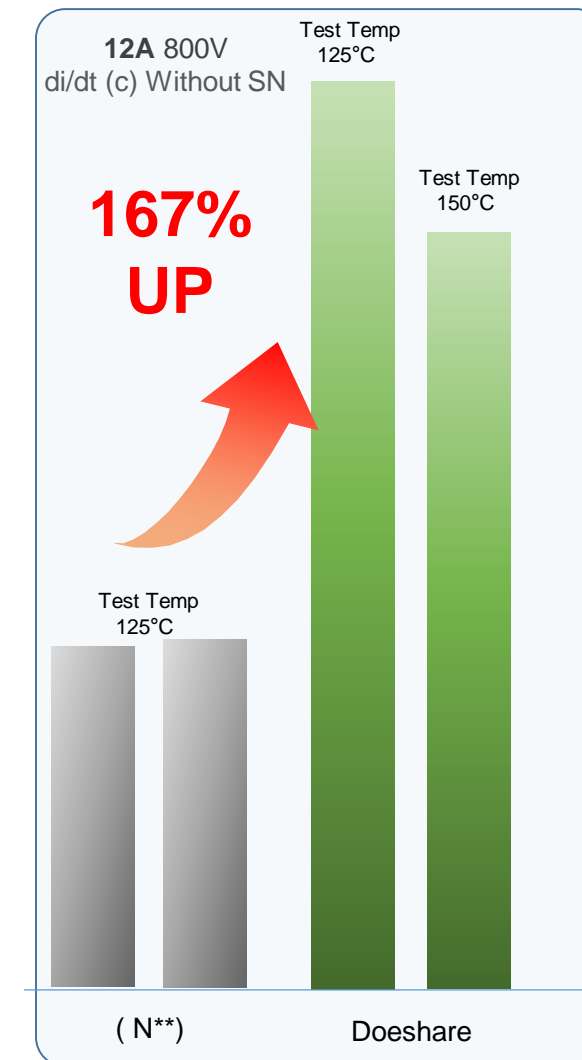
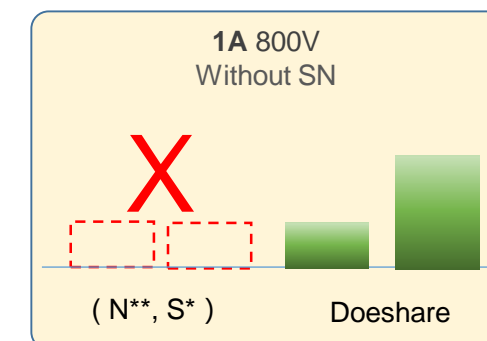
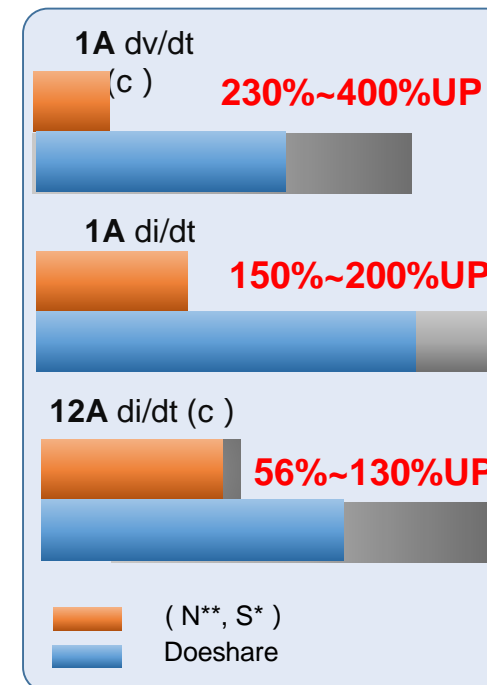
1A 800V di/dt(c)	Part Number	Without SN	xxV/dt (uS)	Test Temp
	Z0107MN(N** , S*)	---	0.44A/ms@5V/dt	110" C
	DT1T5G-B (DOESHARE)	0.6A/ms	---	125" C
	Z0109MA(N** , S*)	---	0.44A/ms@5V/dt	110" C
	DT1T10G-800 (DOESHARE)	1.5A/ms	---	125" C



1A 800V dv/dt(c) & di/dt(c)	Part Number	dv/dt(c)	di/dt(c)	Test Temp
	Z0107MN(N** , S*)	100V/us	20A/us	110" C
	DT1T5G-B (DOESHARE)	330V/us	50A/us	125" C
	Z0109MA(N** , S*)	100V/us	20A/us	110" C
	DT1T10G-B (DOESHARE)	500V/us	60A/us	125" C



12A 800V di/dt(c)	Part Number	Without SN	20V/dt (uS)	Test Temp
	BTA12-800CW (N**)	4.5A/ms	9.9A/ms	125" C
	BTB12-800CW (N**)	4.6A/ms	9.6A/ms	125" C
	DT12T35F-BH (DOESHARE)	12A/ms	22A/ms	125" C
	DT12T35F-BH (DOESHARE)	8A/ms	15A/ms	150" C





Thyristor products SPEC.

	IT	SOT-223	TO-92	TO-126	TO-220F	TO-220	ITO-220	DPAK	D2PAK	TO-3P	ITO-3P
TRIAC	1A	800V/1KV	800V/1KV								
	2A			800V/1KV	800V/1KV						
	4A				800V/1KV	800V	1KV	800V/1KV			
	6A				800V/1KV	800V	1KV	800V/1KV			
	8A			800V	800V	800V	800V	800V			
	12A				800V	800V	800V	800V			
	16A				800V	800V	800V		800V		
	20A				800V	800V	800V		800V		
	25A					800V	800V		800V		
	40A									800V	800V

	IT	SOT-23	SOT-89	SOT-223	TO-92	TO-126	DPAK	TO-220
SCR	0.25A	600V/800V						
	0.8A		600V/800V	600V/800V	600V/800V			
	1A			800V/1000V	800V/1000V			
	2A			800V	800V			
	4A					800V	800V	
	8A						800V	800V
	12A						800V	800V
	16A						800V	800V

	IT	SOD-123	T-1	SMA	DO-15
SIDAC	0.3A	105V			
	0.6A		105V	105V	
	1A			150V / 220V / 240V	120V / 210V / 225V

	<50pF (Low Cj)	SMAF	SMA	SMBF	SMB	Remarks
TSPD(TSS)	40pF	190-430V	190-430V			VDRM : 18-75V : 18V/58V/65V/75V 58-75V : 58V/65V/75V 95-160V : 95V/120V/140V/160V 190-430V : 190V/220V/275V/320V/390V/430V
	50pF			190-430V	190-430V	
	60pF	95-160V	95-160V			
	70pF			95-160V	95-160V	
	100pF	18-75V	18-75V	18V	18V	
	120pF			58-75V	58-75V	

SMD Series

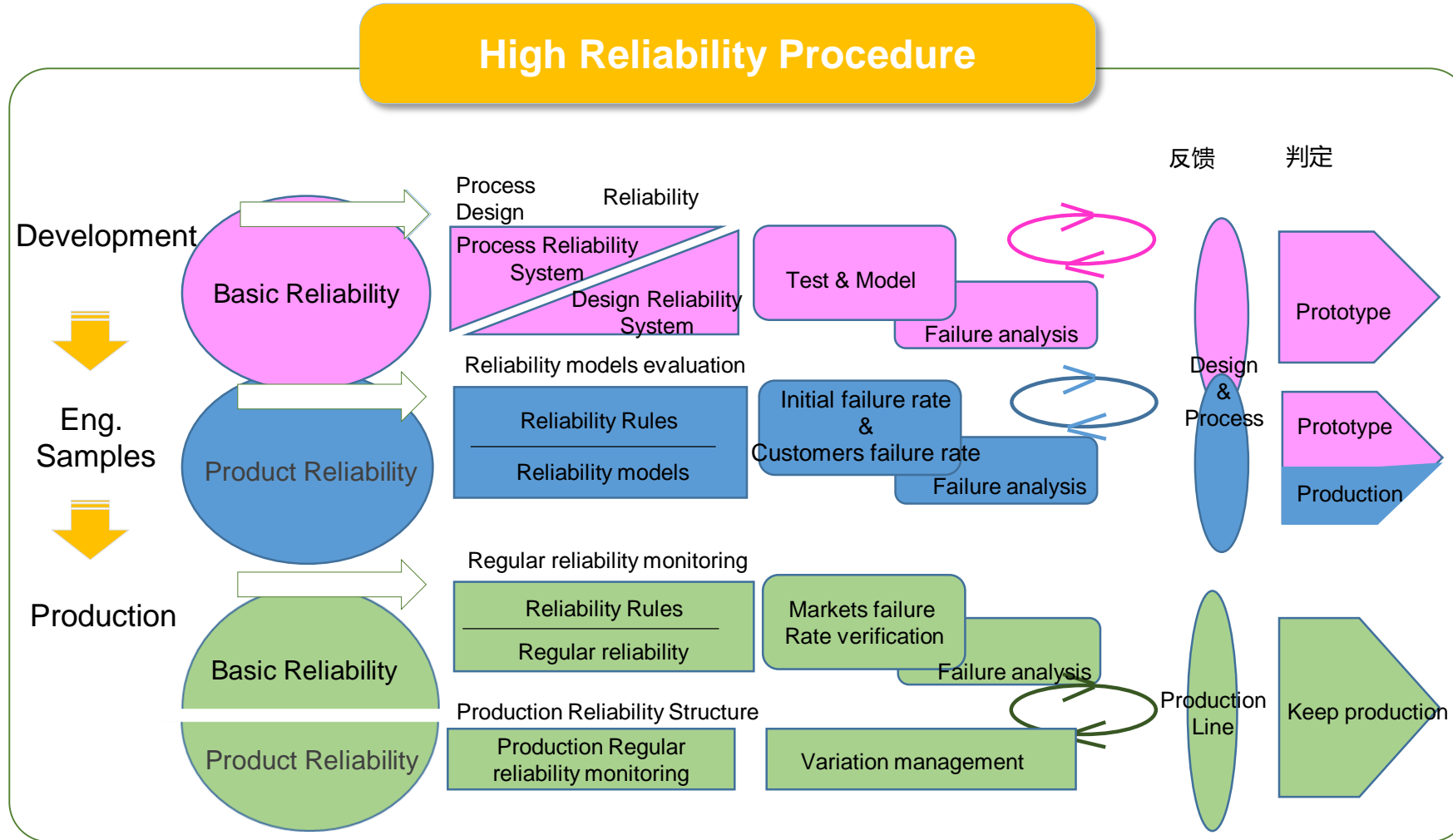


Plug-in Series



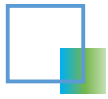


High reliability management concept

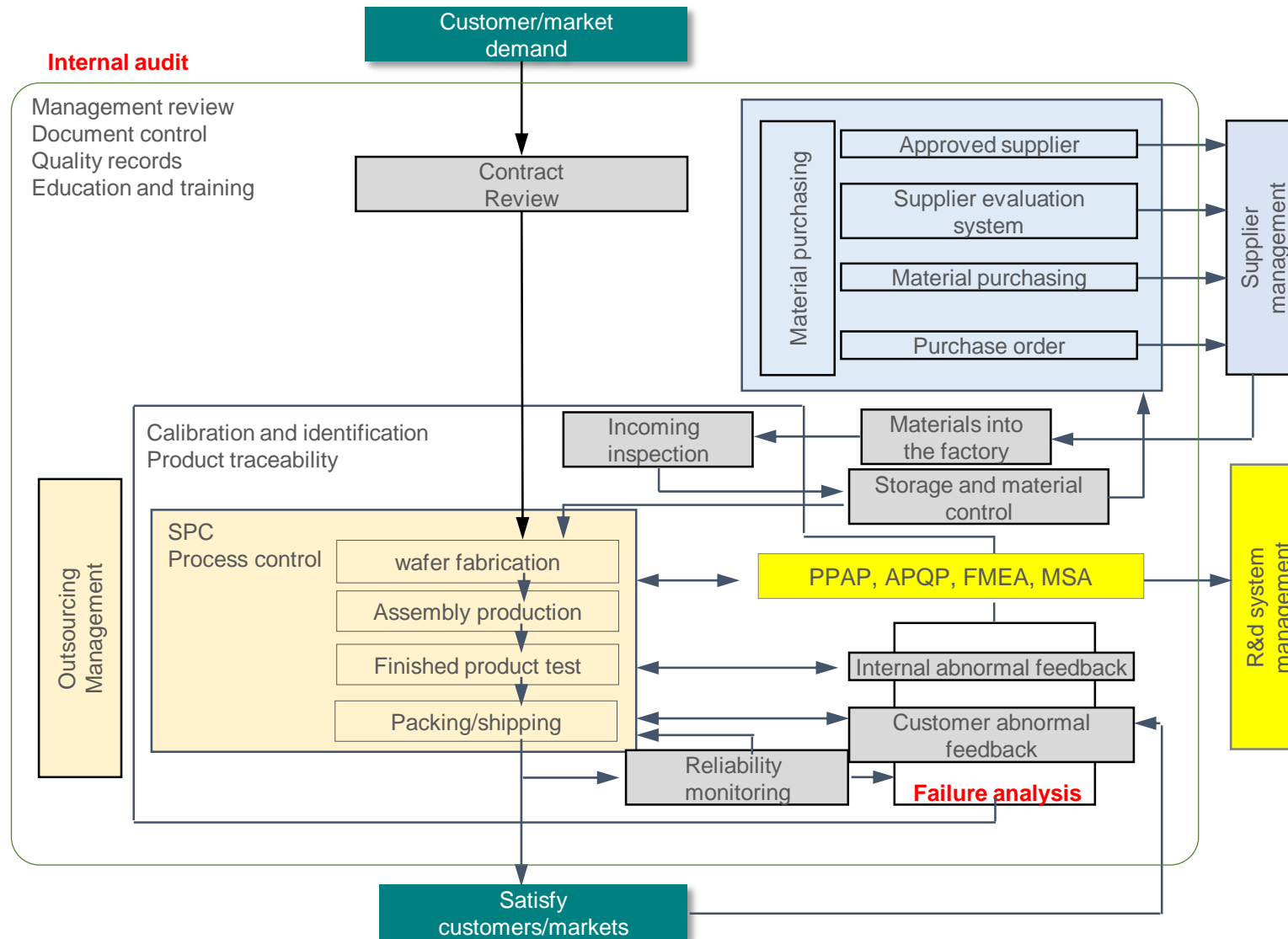


- HTSL - High Temperature Storage Life
- LTSL - Low Temperature Storage Life
- OP/L - Operation Life
- HTRB - High Temp. Reverse Bias
- HUM.- Humidity / H3TRB
- PCT - Pressure Cooker (Autoclave)
- T/S - Thermal Shock
- S/H - Soldering Heat
- F/S - Forward Surge Current
- T/C - Temperature Cycling
- IOL - Intermittent Operation Life
- S/D - Solderability





Robust Quality Control System

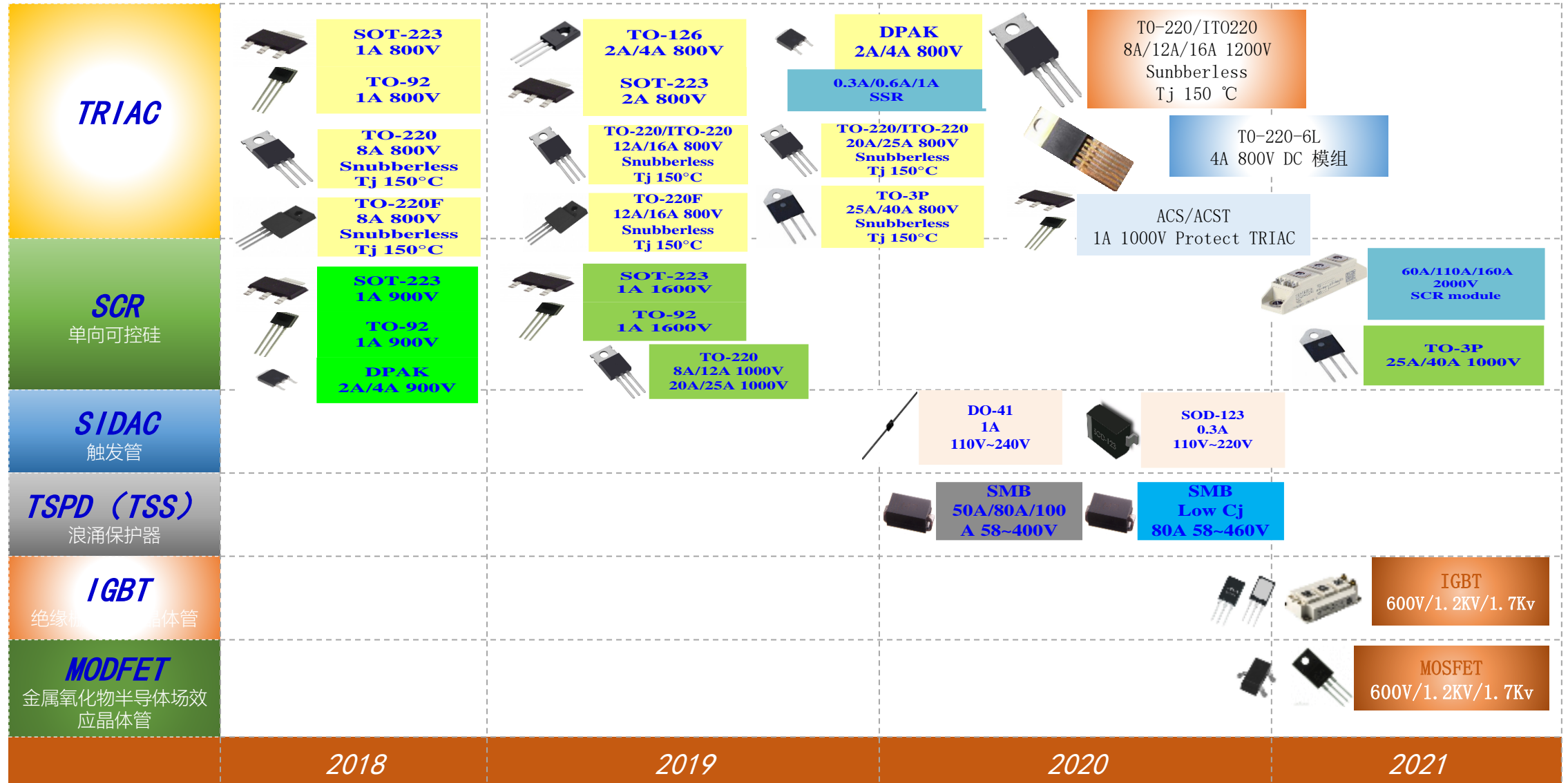


"Doeshare" is in accordance with ISO9001/TS16949 management system requirements to establish a quality control system and implement the operation, and PDCA management cycle management mode to continue to improve.





Products Road Map





Manufacturing base and partners

Wafer Production

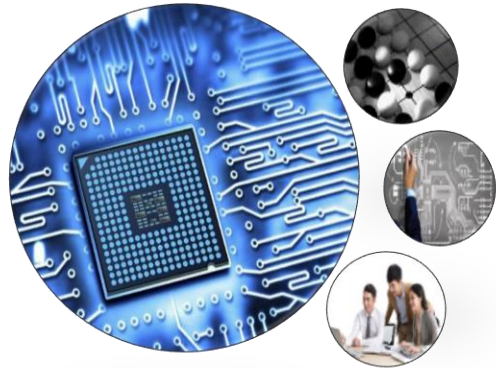


Assembly & Testing

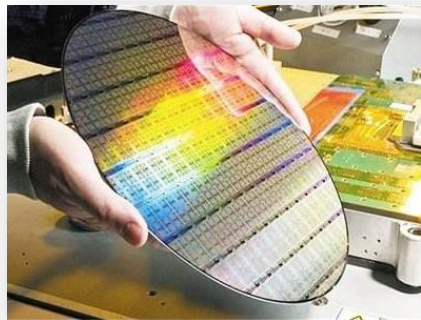
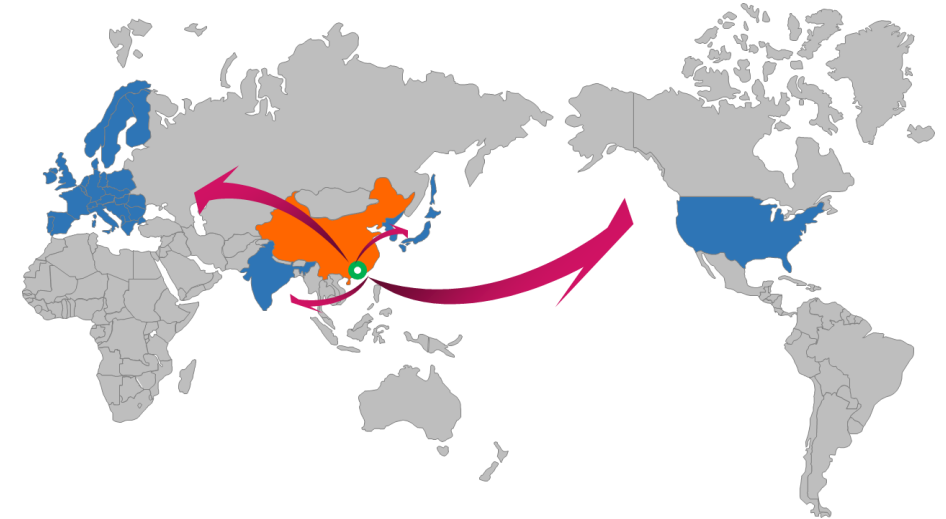


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The company has formed strategic cooperation with the first-line wafer manufacturing and product packaging and testing manufacturers of the thyristor industry at home and abroad, and has stable and reliable thyristor production and manufacturing supporting resources to guarantee and meet the full range and full specification of thyristor products Wafer production and packaging and testing of all shapes.



- Products design & simulation
- Products application and support
- Headquartered in Shenzhen, a national innovative city, an international TECH. industry innovation center, It has established branches and offices in Zhongshan, Shanghai and other places to respond quickly according to customer needs.



Deep cooperation
with famous FAB.

Taiwan



Cooperation with
famous OEM packaging
& testing companies

China



Sufficient warehousing
facilities & storage
capacity

Shenzhen



Independent & agents to
promote worldwide
market

Global



Patent & Certification



Third party product
Reliability test report



Notification of acceptance of patent
application by the state intellectual
property office



ISO9001 quality system certification

