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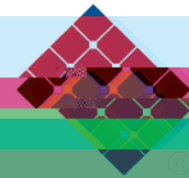
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股票名称 宏微科技

股票代码 688711



MACMIC

专注功率半导体产品设计与制造

Power for the Better

MACMIC



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2025-2026 产品手册

Product Catalogue

江苏宏微科技股份有限公司

MacMic Science & Technology Co., Ltd.

提高用电效率，改善用电质量

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企业简介

COMPANY PROFILE

江苏宏微科技股份有限公司(英文名MACMIC)成立于2006年,主营业务为功率半导体器件的设计、研发、制造及销售,主要产品包括 IGBT、MOSFET、FRED、SiC 等芯片、分立器件、模块等功率半导体器件。公司自产 IGBT、FRED 芯片技术已达国际先进、国内领先水平,打破国外垄断,填补了多项国内空白。宏微科技是国内功率半导体器件行业领军企业之一,2021年,成功登陆科创板,股票代码 688711。

MACMIC was founded in 2006. Its main business is the R&D, manufacturing and sales of power semiconductor devices. The main products of MACMIC are IGBT, MOSFET, FRED, SiC chips, discrete devices and modules.

MACMIC has advanced IGBT and FRED technologies. MACMIC focuses on becoming an expert in providing power semiconductor device solutions. The company is one of the leading companies in the power semiconductor industry. MACMIC was successfully listed on the Shanghai Science and Technology Innovation Board with stock ticker 688711.

业务范围 BUSINESS SCOPES

- ◆ 设计、研发、生产和销售新型电力半导体芯片、分立器件及模块,如 IGBT、FRED、SiC 芯片、分立器件、标准模块及用户定制模块 (CSPM)。
- ◆ Design, development, manufacturing, and marketing of new types of power semiconductor devices, i.e. IGBT, FRED, SiC chips and discrete devices, standard and customer-specific power modules (CSPM).

品质体系 QUALITY ASSURANCE SYSTEMS

产品和服务,满足并超越顾客的要求和期望。

Product and services

providing better products and services to meet

质量管理体系控制,每道工序均经过严格检测,确保产品的质量和稳定性。

体器件解决方案的提供者

Independent innovation, design, development

Power for the Better

企业实力

COMPANY STRENGTH

功率模块生产线 POWER MODULE FABRICATION LINES

Fab 1 (苏州工厂): 30000m²先进厂房 17000m²抗静电超净模块车间

Fab 2 (新竹厂区): 11200m²先进厂房 5600m²抗静电超净模块车间

Fab 4 (芯动能[®]): 14000m²先进厂房 12300m²抗静电超净模块车间

*注: 芯动能是宏微科技的子公司

Fab 4 (芯动能[®]): Fab Area: 14000m² Clean Room Area: 12300m²

功率 IGBT 动态测试仪
IGBT 栅电荷测试仪

IGBT Switching Parameter Tester
IGBT Charge Tester

IGBT Tester

IGBT Tester

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IGBT 模块 IGBT MODULES

产品范围 Ranges

- 600-1700V / 10-950A

封装 Packages

- GJ, GS, GQ, GD, GK, GQC, GWJ, GCB, GCE, GH, GHD, GW, GWD, GQD, GQW, GQWD

单单元电路

Single Circuit

半桥电路 全桥电路 三相桥电路

Half-Bridge Circuit Full-Bridge Circuit

Three-Phase Bridge Circuit

斩波电路 共发射极电路

Chopping Circuit Common-Emitter Circuit

开关速度快

Fast Switching Speed

导通损耗低

Low Conduction Loss

软关断特性

Soft Turn-Off Characteristics

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600-650V IGBT 模块 600-650V IGBT MODULES

Tc=25°C unless otherwise noted

Circuit	Part Number	V _{CES} min (V)	I _C Tc=25°C (A)	V _{CE(sat)} (V)	P _D max (W)	E _{off} (mJ)	R _{th(jc)} (K/W)	Package Outline
MMG300B065PD6TC	MMG300B065PD6TC	650	300	1.55	862	11.20	0.17	GD
MMG100CE065PD6TC	MMG100CE065PD6TC	650	100	1.55	300	2.40	0.45	GCE
MMG75S060B6TC	MMG75S060B6TC	600	75	1.55	250	2.15	0.60	GS
MMG100S060B6TC	MMG100S060B6TC	600	100	1.55	330	2.15	0.45	GS
MMG150S060B6TC	MMG150S060B6TC	600	150	1.65	441	5.00	0.34	GS
MMG200S060B6TC	MMG200S060B6TC	600	200	1.65	550	6.70	0.25	GS
MMG300C060B6TC	MMG300C060B6TC	600	300	1.65	660	8.40	0.17	GD
MMG300D060B6TC	MMG300D060B6TC	600	300	1.55	862	10.70	0.17	GD

应用 Applications

- 逆变电焊机、切割机

Welding Machine, Cutting Machine

- 电镀电源、感应加热

Plating Power Supply, Induction Heating

- UPS、变频器、斩波调速

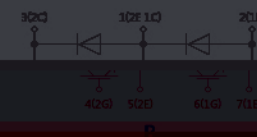
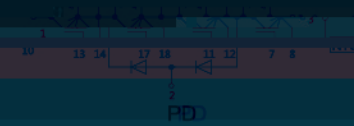
UPS, Inverter, Chopper

- 工业伺服、开关磁阻电机驱动器

Servo Drive, Switched Reluctance Drive

应用案例 Application Case

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750V IGBT 模块 750V IGBT MODULES

1200V IGBT 模块 1200V IGBT MODULES

Tc=25°C unless otherwise noted

Outline	Number	V _{CE0} min. (V)	I _C Tc=25°C 65-110°C (A)	V _{CE(sat)} typ. (V)	I _C max. (A)	V _{CE(sat)} Tj=125°C (V)	P _{tot} max. (kW)	Outline
GS	MMG280VD075X6T7	750	280	1.38	595	15.5	0.252	GVD
GS	MMG400VD075X6TC-12	750	400	1.40	1027	24.0	0.146	GVD
GS	MMG400VB075X6TC	750	400	1.21	1071	21.7	0.107	GVB
GS	MMG400VC075X6TC	750	400	1.04	1070	23.0	0.14	GVC
GD	MMG820V075X6T7	750	820	1.10	937	20.0	0.10	GV
GD	MMG820V075X6TC	750	820	1.15	1070	20.0	0.14	GV
GV	MMG950V075X6T7	750	950	1.15	1800	28.0	0.10	GV
GOC	MMG500VE075X6T7	750	500	1.35	600	15.0	0.23	GVE
GCB	MMG1000V075X6T7	750	1000	1.25	1000	23.0	0.10	GVB

Tc=25°C unless otherwise noted

Outline	Number	V _{CE0} min. (V)	I _C Tc=65-110°C (A)	V _{CE(sat)} typ. (V)	I _C max. (A)	V _{CE(sat)} Tj=125°C (V)	P _{tot} max. (kW)	Outline
EB	MMG50S120B6UC	1200	50	1.70	405	3.10	0.37	EB
EB	MMG75S120B6UC	1200	75	1.70	535	4.40	0.32	EB
EB	MMG100S120B6UC	1200	100	2.20	555	5.00	0.27	EB
EB	MMG150S120B6UC	1200	150	2.20	600	5.60	0.23	EB
H	MMG300D120B6UC	1200	300	1.90	1578	23.50	0.09	H
H	MMG750C120H6UC	1200	75	1.70	535	4.40	0.26	H
X	MMG100CB120A60TC	1200	10	1.85	107	0.69	1.25	X



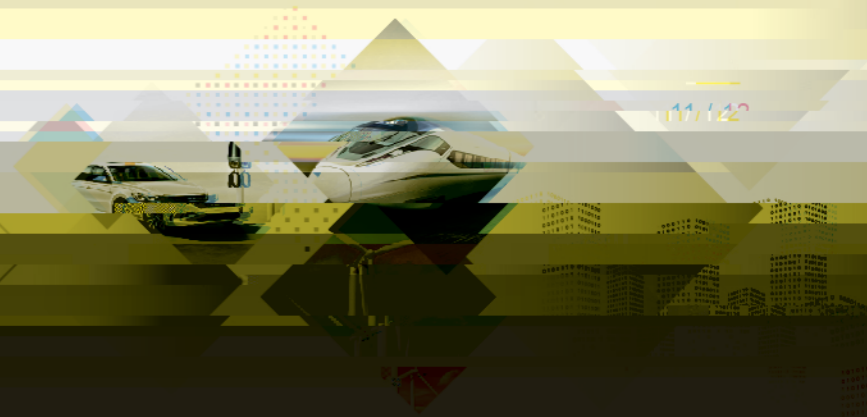
◆ 1200V IGBT 模块 1200V IGBT MODULES

Tc=25°C unless otherwise noted

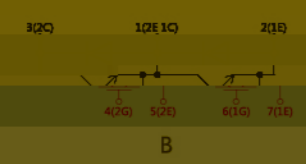
Circuit	Part Number	V _{CES} min. (V)	I _C (A)	V _{CE(sat)} typ. (V)	P _D max. (W)	E _{off} (mJ)	K _{thJC} max. (K/W)	Package Outline
	MMG35HD120X161C	1200	35	1.85	208	3.30	0.72	GHD
	MMG50HD120XB6TC	1200	50	1.80	278	4.20	0.54	GHD
	MMG50HD120XT6TC	1200	50	1.80	278	4.20	0.54	GHD
	MMG25H120XB6TC	1200	25	1.85	166	2.40	0.90	GH
	MMG40H120XB6TC	1200	40	1.95	208	3.35	0.72	GH
	MMG50W120XB6TC	1200	50	1.85	278	4.00	0.54	GW
	MMG75WT20XB6TC	1200	75	1.85	385	6.20	0.39	GW
	MMG100W120XB6TC	1200	100	1.85	515	9.10	0.29	GJ
	MMG150W120X6TC	1200	150	1.85	750	13.00	0.20	GW
	MMG75J120UZ6TC	1200	75	1.85	385	6.20	0.39	GJ
	MMG100J120UZ6TC	1200	100	1.85	515	9.10	0.29	GJ
	MMG150J120UZ6TC	1200	150	1.85	750	14.40	0.20	GJ
	MMG75S120B6TC	1200	75	1.85	385	6.20	0.39	GS
	MMG100S120B6TC	1200	100	1.70	515	8.30	0.29	GS
	MMG150S120B6TC	1200	150	1.85	750	13.00	0.20	GS
	MMG150D120B6TC	1200	150	1.70	789	12.10	0.19	GD

◆ 1200V IGBT 模块 1200V IGBT MODULES

Circuit	Part Number	V _{CES} min. (V)	I _C (A)	V _{CE(sat)} typ. (V)	P _D max. (W)	E _{off} (mJ)	K _{thJC} max. (K/W)	Package Outline
	MMG200Q120B6TC	1200	200	1.70	1074	16.50	0.14	GQ
	MMG200D120B6TC	1200	200	1.70	1074	16.50	0.14	GQ
	MMG400D120B6TC	1200	400	1.85	2000	35.00	0.75	GD
	MMG450D120B6TC	1200	450	1.85	2235	52.00	0.07	GD
	MMG300WB120B6TC	1200	300	1.80	1596	26.30	0.094	GWB
	MMG300WB120TLA6TC	1200	300	1.70	1500	26.50	0.09	GWB
	MMG25CH120XB6T7	1200	25	1.80	163	3.18	0.92	GCB
	MMG75HE120XB6T7_W11	1200	75	1.55	340	11.24	0.44	GHE
	MMG150W120XB6T7	1200	150	1.55	680	22.48	0.44	GHE
	MMG450WQ120PD6T7	1200	450	1.53	1400	13.70	0.107	GWQ
	MMG450WQ120PD6T7H	1200	450	1.53	1400	13.70	0.107	GWQ
	MMG560WQ120BF6T7	1200	560	1.50	1666	18.70	0.09	GWQ
	MMG800D120B6T7	1200	800	1.50	3061	132.00	0.05	GD
	MMG800WB120B6T7	1200	800	1.80	3750	121.0	0.04	GWB



Circuit	Part Number	V _{max} min.	I _{dc} T _c =65-110°C (A)	V _{max} (typ) (V)	P _{tot} max. (W)	I _{peak} T _J =125°C (mA)	P _{SMC} max. (kW)	Package Qualification
SPT*								
	MMG75S170B	1700	75	2.40	535	18.5	0.28	GS
	MMG100D170B	1700	100	2.30	789	25	0.19	GD
	MMG150D170B	1700	150	2.30	1071	41	0.14	GD
	MMG200D170B	1700	200	2.30	1383	56	0.11	GD
	MMG300D170B	1700	300	2.30	1875	83	0.08	GD
	MMG300WB170B	1700	300	2.65	2000	84	0.075	GWB
	MMG450WB170B	1700	450	2.70	2708	158	0.055	GWB
	MMG600WB170B	1700	600	2.70	3750	245	0.04	GWB
	MMG120D120B6TC	1200	120	2.15	500	17	0.30	GW
	MMG100W170HX6TC	1700	100	2.20	750	25	0.20	GW



中升汽车IGBT模块应用

Circuit	Part Number	V _{max} min.	I _{dc} T _c =65-110°C (A)	V _{max} typ. (V)	P _{tot} max. (W)	I _{peak} T _J =125°C (mA)	P _{SMC} max. (kW)	Package Qualification
	MMG450WB120B6TC	1200	450	1.85	2305	45.0	0.065	GWB
	MMG600WB120B6T6	1200	600	1.70	2941	74.5	0.051	GWB
	MMG600WB120B6T7	1200	600	1.80	3150	121.0	0.04	GWB
	MMG120D120B6T7	1200	120	2.15	500	17	0.30	GW
	MMG100W170HX6T6	1700	100	2.20	750	25	0.20	GW
	MMG600V120X6RS	1200	600	1.60	1500	51.0	0.10	GV

T_c=25°C unless otherwise noted

see noted
Package
Outline

GWB

GWB

GWB

GD

GW

GV

SiC 模块 SiC MODULES



SiC IGBT 模块

Number	V _{CE(sat)} (V)	I _C (A)	V _{CE(sat)} (V)	P _{tot} (KW)	T _{max} (°C)	Package Outline
MMS2X60J120D	1200	2x60	1.40	0.11	175°C	SJ
MMS2X100J085D	1200	2x100	1.38	0.24	175°C	SJ



塑封 SiC 模块 TRANSFER MOLDED SiC MODULES

Tc=25°C unless otherwise noted

Package Outline	Part Number	V _{CE(sat)} (V)	I _C (A)	R _{DS(on)} (mΩ)	P _{tot} /P _{tot} (KW)	T _{max} (°C)	Package Outline
DSC	CC002HB12C1P1-R4000	1200	800	1.6	0.016	175°C	DSC
NSC	CC003HB12C1P1-R4000	1200	400	0.3	0.033	175°C	NSC
NSC	CC005HB12C1P1-F1000	1200	200	0.8	0.08	175°C	NSC
NSC	CC010ST1	1200	100	0.3	0.03	175°C	NSC
SMPD	CC035HB12S1C1-F1000	1200	40	35	0.27	175°C	SMPD
SMPD	CC060UR12S4C1-R4000	1200	15	60	0.50	175°C	SMPD
SMPD	CC070HB12S4C1-F4000	1200	50	10	0.44	175°C	SMPD



SiC MOSFET 模块 SiC MOSFET MODULES

Number	V _{DS(sat)} (V)	I _D (A)	R _{DS(on)} (mΩ)	P _{tot} (KW)	T _{max} (°C)	Package Outline
MMN01V120X6BS	1200	540	1.57	0.105	175°C	NV
MMN02V120X6BS	1200	439	2.12	0.118	175°C	NV
MMN13V120X6TN	1200	107	13.4	0.505	175°C	NV
MMN14S120B6TN	1200	140	13.8	0.467	175°C	NS



SiC 分立器件

SiC DISCRETES



◆ SiC SBD 分立器件 SiC SBD DISCRETES

Tc=25°C unless otherwise noted

Part Number	V _{oss}	I _o	R _{ds(on)}	V _g	I _{max}	Qualification	Package Outline
MM200N120Z	1200	20	1.45	180	175°C	Industrial	TO-247-2L
MM200N120Z	1200	40	1.40	300	175°C	Industrial	TO-247-2L

◆ SiC SBD 分立器件 SiC SBD DISCRETES

Tc=25°C unless otherwise noted

Part Number	V _{oss}	I _o	R _{ds(on)}	V _g	I _{max}	Qualification	Package Outline
MM11NAS075KZ	750	138	11	217	175°C	Industrial	TO-247-4L

Part Number	V _{oss}	I _o	R _{ds(on)}	V _g	I _{max}	Qualification	Package Outline
MM30NAS120KZ	1200	64	30	117	175°C	Industrial	TO-247-4L



IGBT 模块

IGBT MODULES

产品范围 Ranges

- 200-1700V/ 60-600A

封装 Packages

- E7, EN, E1, EY, E8, EYB, ED

特性 Features

- Insulated Common-Cathode Circuit

- 绝缘式共阳电路

应用 Applications

- 电焊机

封装 Packages

- E7, EN, E1, EY, E8, EYB, ED

特性 Features

- Soft-Recovery Characteristics

- 反向恢复软特性

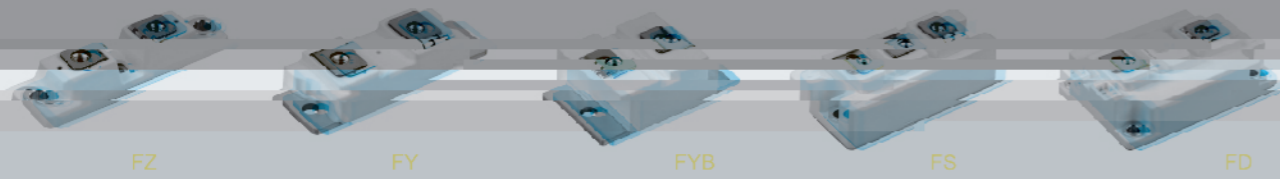
应用 Applications

- 工业电焊机

特性 Features

- 双向四象限整流装置





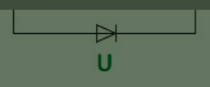
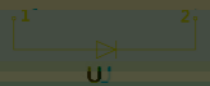
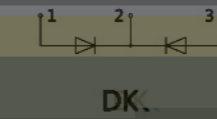
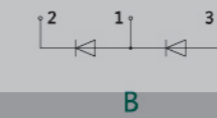
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Tc=25°C unless otherwise noted

Circle 1

Circle 2

1 2
DK1
(Non-insulated)



Part Number	V _{RRM} (V)	I _{F(AV)} 4-0.5 (A)	I _{FSM} 10ms (A)	V _{FM} (V)	I _{FM} (A)	t _{rr} (ns)	R _{th(j-c)} (K/W)	Package Outline
MMF400Z020DK1	200	2x200	1800	0.95	200	390	0.20	FZ
MMF200ZB040DK1	400	2x100	1250	1.00	100	70	0.20	FZ
MMF200ZB040DK1C	400	2x100	1000	1.10	100	75	0.22	FZ
MMF200ZB040DK1D	400	2x100	700	1.25	100	49	0.37	FZ
MMF800Y020DK1	200	2x400	3000	1.00	400	165	0.08	FY
MMF200Y040DK1	400	2x100	1250	1.00	100	70	0.10	FY
MMF300Y040DK1	400	2x150	1900	1.20	150	65	0.10	FY
MMF300Y040DK1B	400	2x150	1900	1.20	150	65	0.10	FY
MMF400Y040DK1	400	2x200	2550	1.20	200	75	0.08	FY
MMF400Y040DK1B	400	2x200	2550	1.20	200	75	0.08	FY
MMF200Y060DK1	600	2x100	1200	1.20	100	91	0.20	FY
MMF300Y060DK1	600	2x150	2500	1.20	150	100	0.08	FY
MMF300YB050U	500	300	3800	1.20	300	160	0.11	FYR
MMF300YB070U	700	300	3800	1.38	300	121	0.12	FYR
MMF600S120U	600	600	4800	1.15	600	170	0.070	FS
MMF600S120U	600	600	4800	1.15	600	170	0.11	FS
MMF600S120U	600	600	4800	2.80	600	200	0.10	FS
MMF400D120U	400	400	3600	2.10	400	190	0.085	FD

Part Number	V _{RRM} (V)	I _{F(AV)} d=0.5 Tc=110°C (A)	I _{FSM} 10ms Tc=110°C (A)	V _{FM} (V)	I _{FM} (A)	t _{rr} (ns)	R _{th(j-c)} (K/W)	Package Outline
MMF200S060B	600	2x200	2000	1.15	200	140	0.18	FS
MMF300S060B	600	2x300	3000	1.15	300	130	0.14	FS
MMF150S120B	1200	2x150	1500	1.60	150	145	0.22	FS
MMF200S120B	1200	2x200	1800	2.30	200	110	0.22	FS
MMF300S120B	1200	2x300	2700	2.80	300	135	0.14	FS
MMF100S170B	1700	2x100	1000	1.80	100	500	0.22	FS
MMF300N060DK1B	600	2x150	1410	1.25	150	85	0.34	FN
MMF200N120DK	1200	2x100	1100	1.77	100	150	0.44	FN
MMF150S080DK	600	2x150	1500	1.15	150	130	0.22	FS
MMF300S080DK	600	2x200	2000	1.15	200	140	0.18	FS
MMF300S080DK	600	2x300	3000	1.15	300	150	0.14	FS
MMF150S120DK	1200	2x150	1500	1.60	150	145	0.22	FS
MMF200S120DK	1200	2x200	1800	2.30	200	110	0.22	FS
MMF300S120DK	1200	2x300	2700	2.80	300	135	0.14	FS
MMF200N120DA	1200	2x100	1100	1.77	100	150	0.44	FN
MMF200S060DA	600	2x200	2000	1.15	200	140	0.18	FS
MMF300S060DA	600	2x300	3000	1.15	300	150	0.14	FS
MMF150S120DA	1200	2x150	1500	1.60	150	145	0.22	FS

DA



FRED 分立器件 FRED DISCRETES

Tc=25°C unless otherwise noted

Symbol	Part Number	V _{RRM} (V)	I _{F(AV)} d=0.5 Tc=110°C (A)	I _{FSM} 10ms Tc=45°C (A)	V _{FM} @ I _{FM} Tc=25°C (V)	I _{FM} Tc=25°C (A)	t _{rr} (ns)	R _{th(jc)} (K/W)	Package Outline
D	MMF2X100J040D	400	2×100	1100	1.20	100	62	0.34	FJ
	MMF2X60J070D	700	2×60	600	1.15	60	150	0.80	FJ
DK2B	MMF200S060DK2B	600	2×200	2000	1.15	200	140	0.18	FS
	MMF300S060DK2B	600	2×300	3000	1.10	300	140	0.14	FS
DA2B	MMF150S060DA2B	600	2×150	1500	1.25	150	95	0.30	FS
	MMF200S060DA2B	600	2×200	2000	1.15	200	140	0.18	FS
B2B	MMF300S120DA2B	1200	2×300	2700	2.80	300	135	0.14	FS
	MMF150S120B2B	1200	2×150	1500	1.00	150	140	0.22	FS

产品范围 Ranges

- 300A/700V/90A/600V

应用 Applications

- 电机驱动
- 光伏逆变器应用、LED 电源

封装 Packages

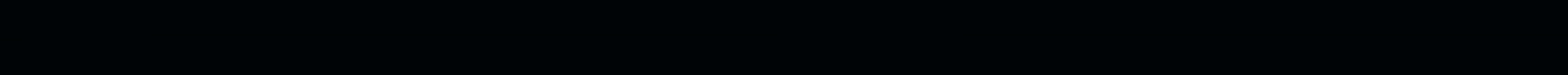
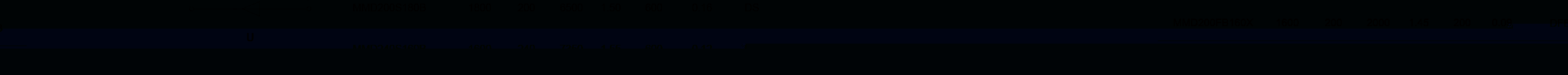
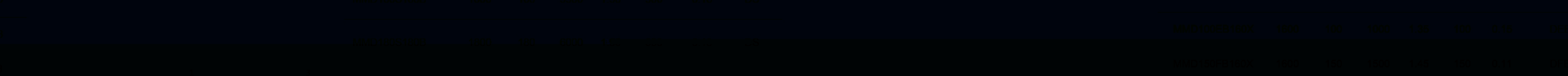
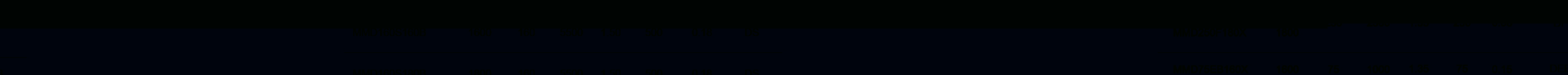
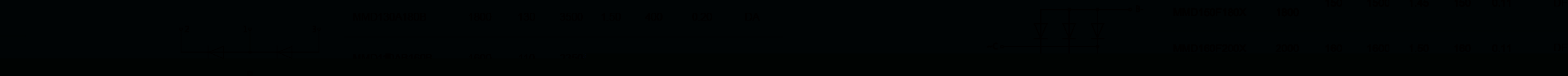
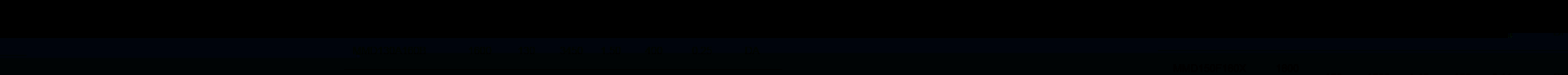
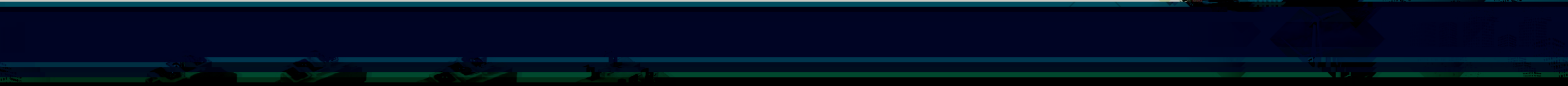
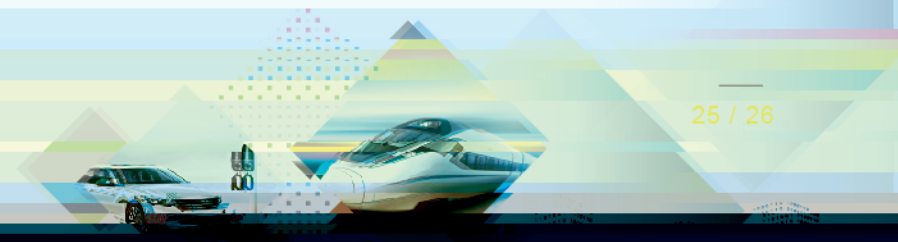
- TO-220, TO-247E
- TO-247, TO-3P

特性 Features

- 低寄生电感
- 高浪涌能量

高浪涌能量 High Avalanche Energy

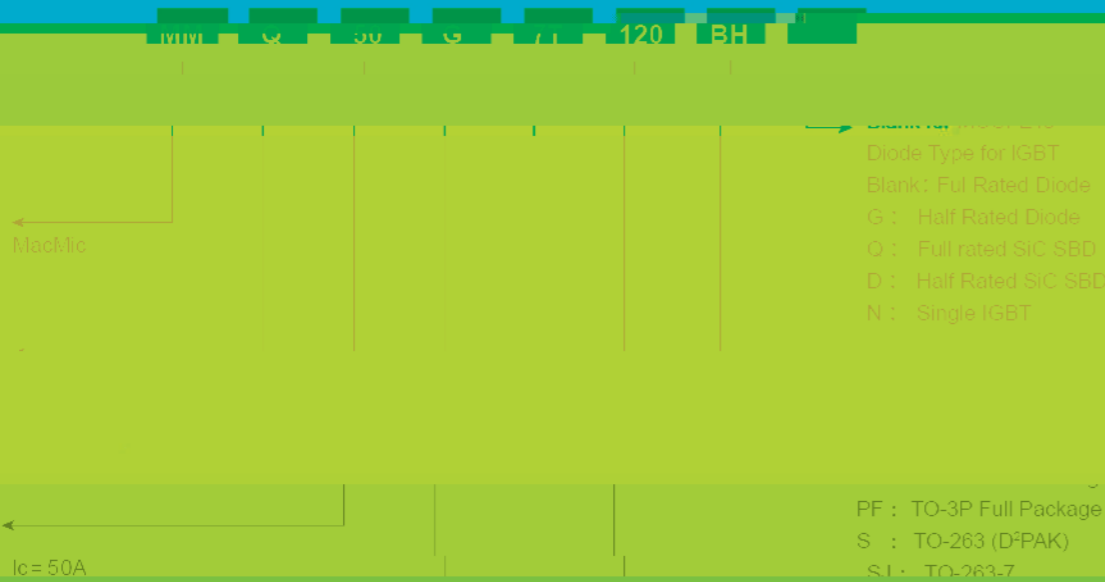




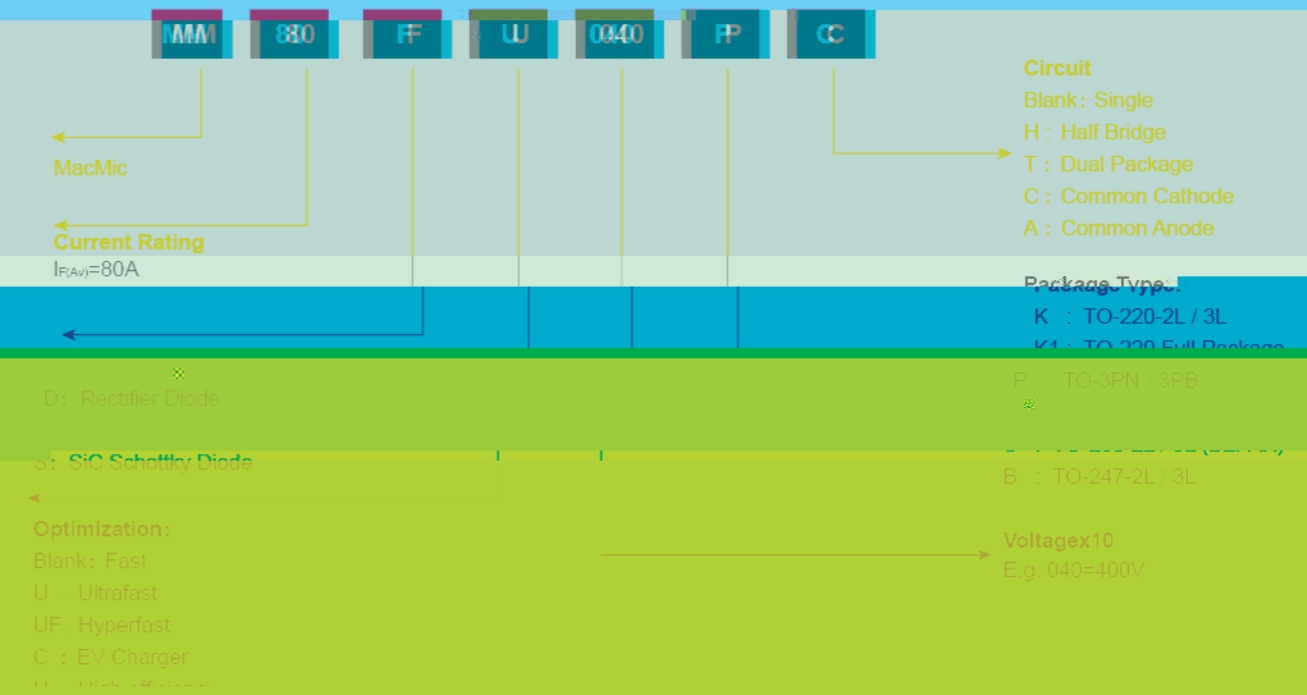
产品命名
PRODUCT NAMING

PRODUCT NAMING

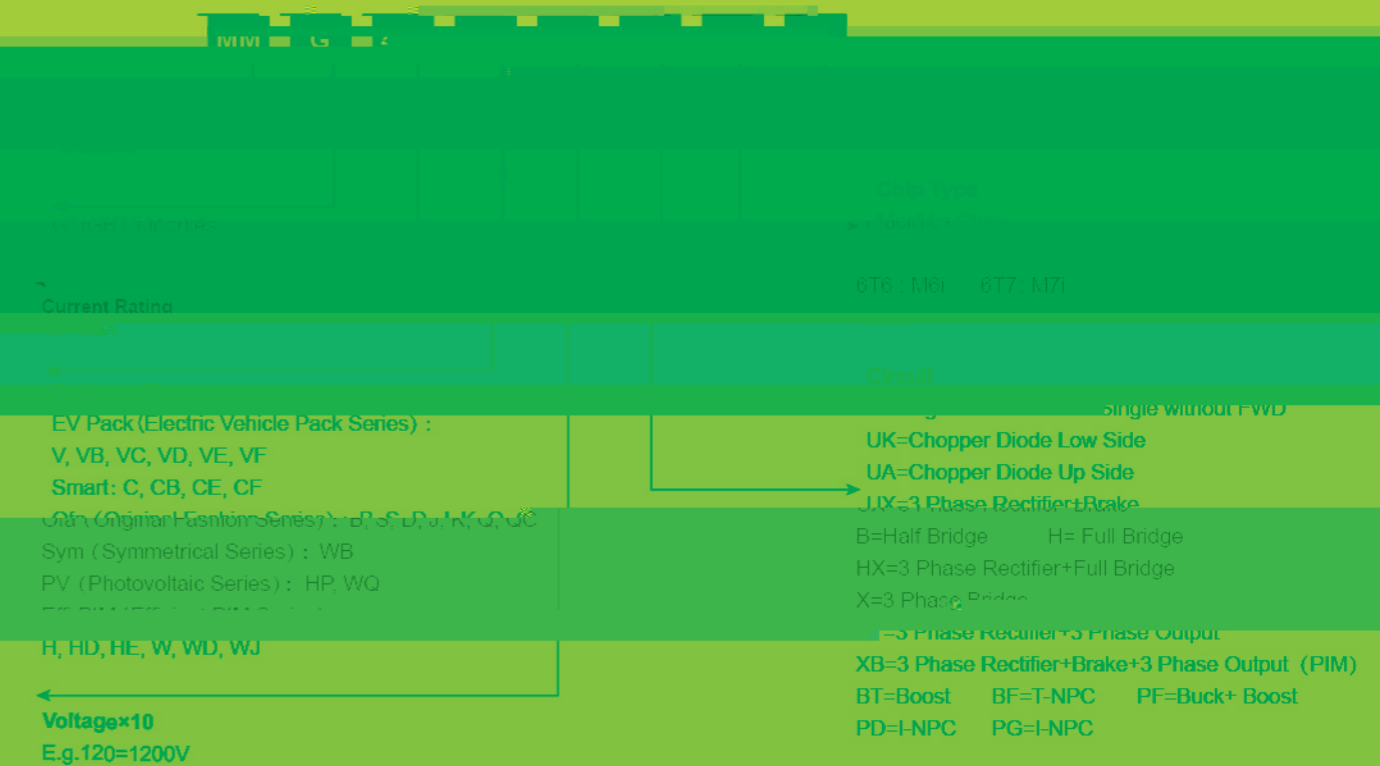
IGBT & MOSFET & SiC MOSFET 分立器件
IGBT & MOSFET & SiC MOSFET DISCRETES



FRED & SiC SBD 分立器件 FRED & SiC SBD DISCRETES

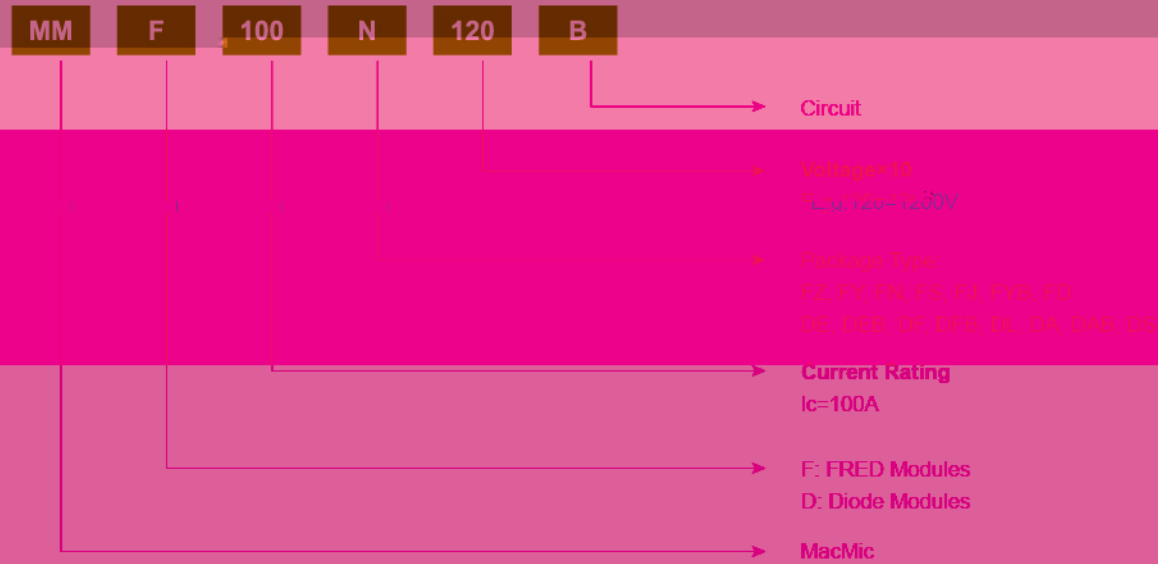


IGBT 模块 & 混合 SiC 模块 IGBT MODULES & HYBRID SiC MODULES

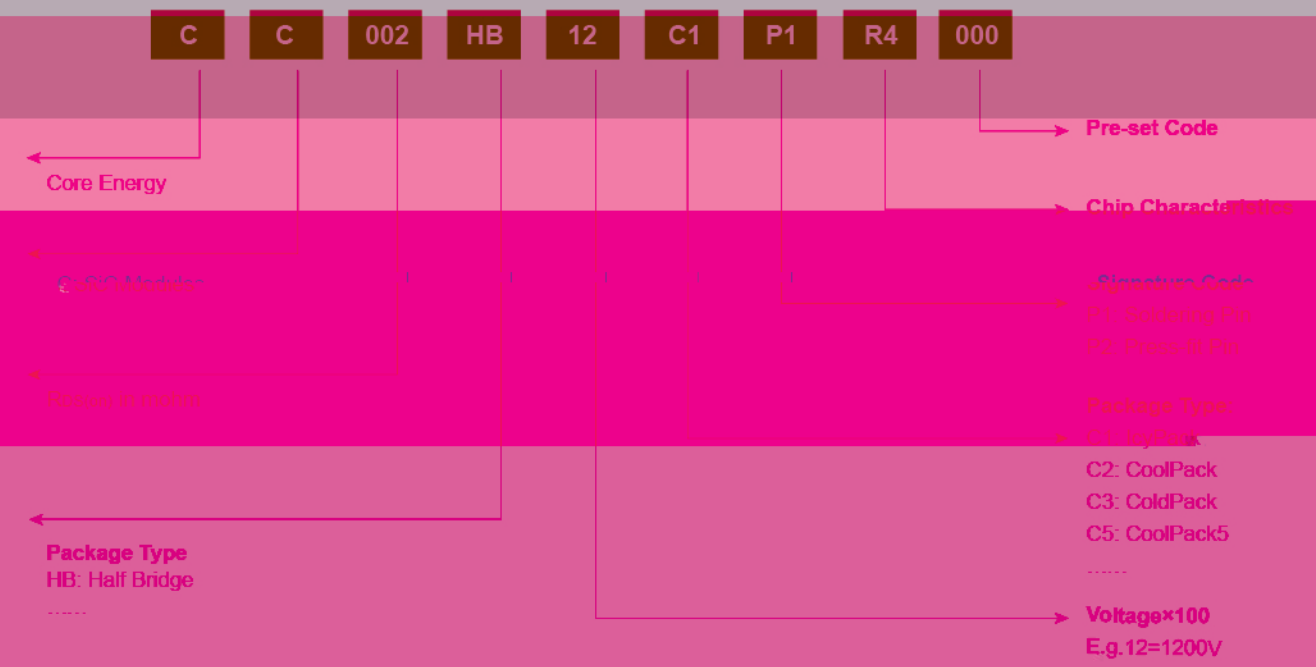


FRED 模块 / 整流二极管模块 / 三相整流桥模块

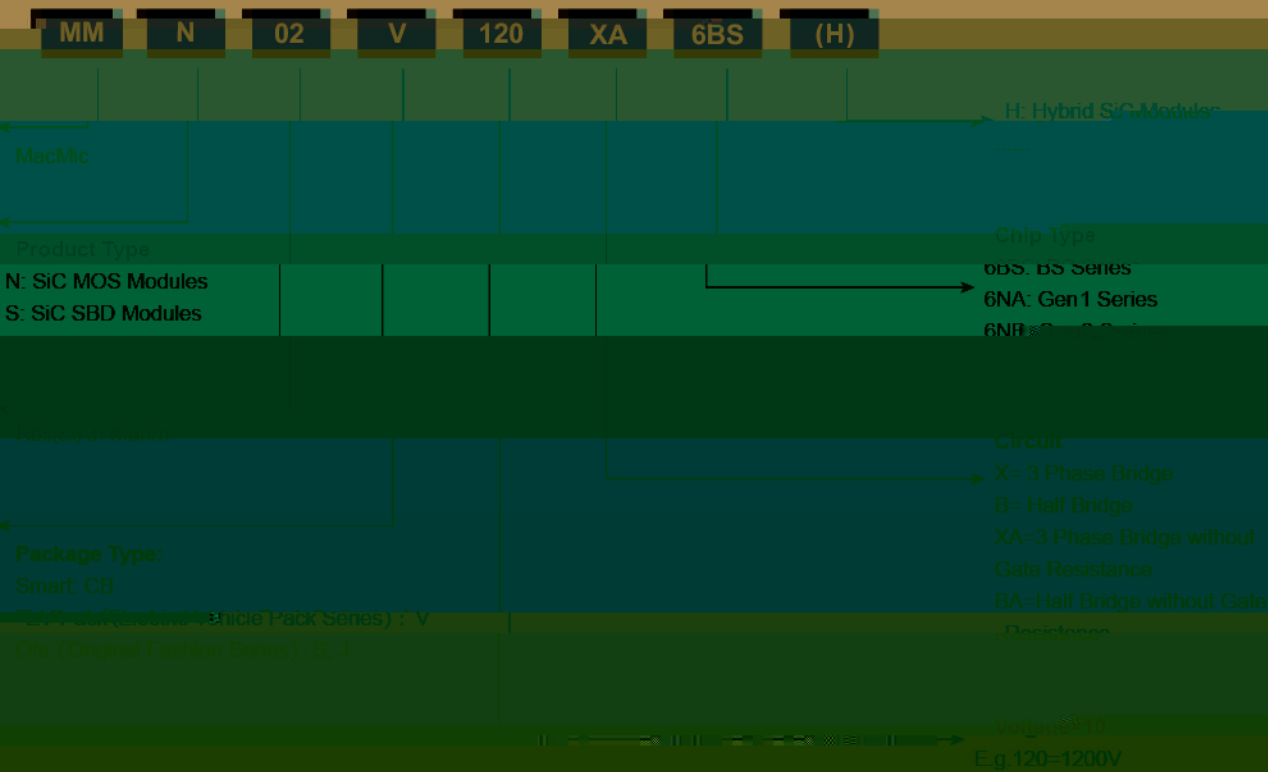
FRED MODULES / RECTIFIER DIODE MODULES / THREE-PHASE RECTIFIER BRIDGE MODULES



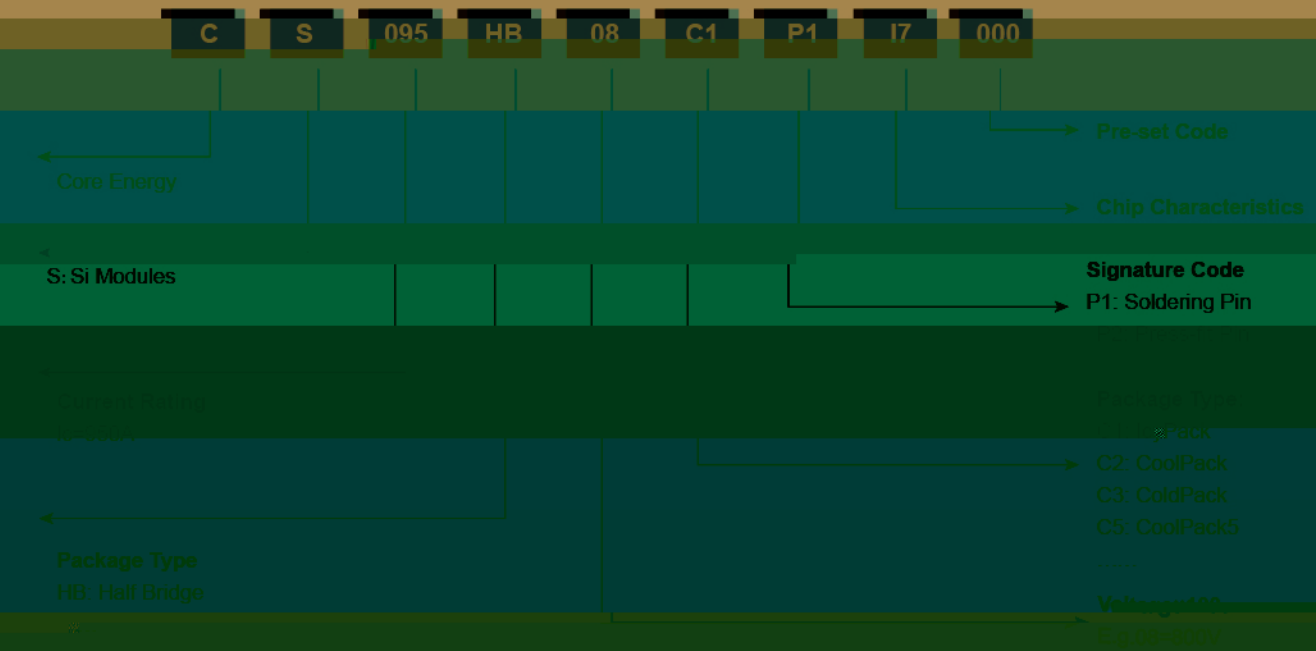
塑封 SiC 模块 TRANSFER-MOLDED SiC MODULES



SiC MOSFET 模块 SiC MOSFET MODULES



塑封 IGBT 模块 TRANSFER-MOLDED IGBT MODULES



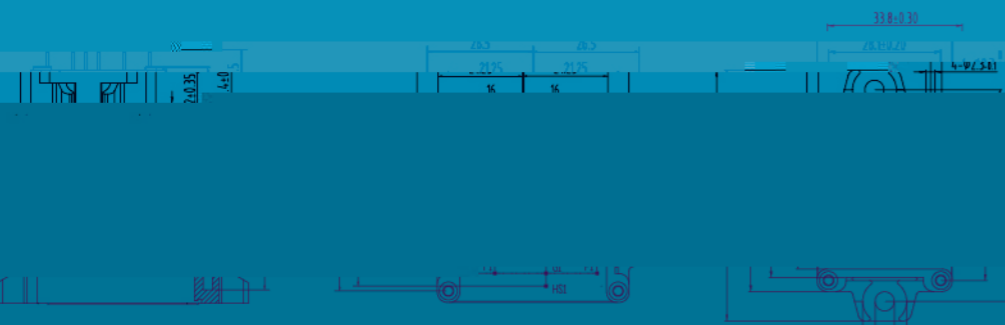
外观尺寸图

OUTLINE DRAWINGS

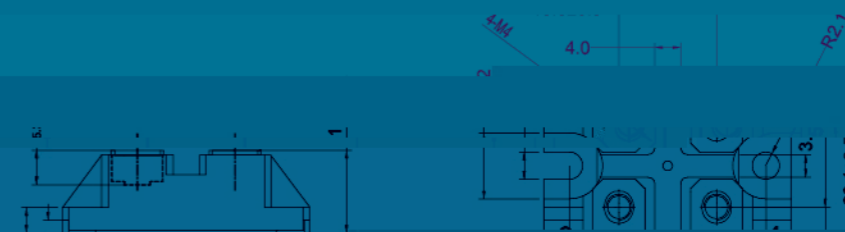
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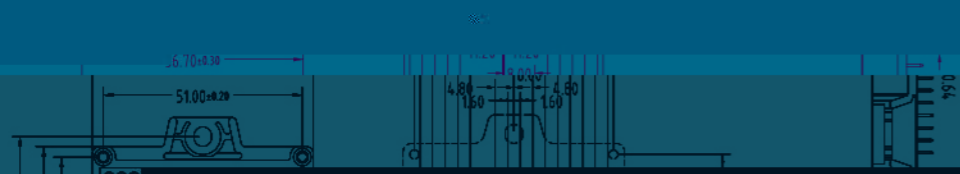
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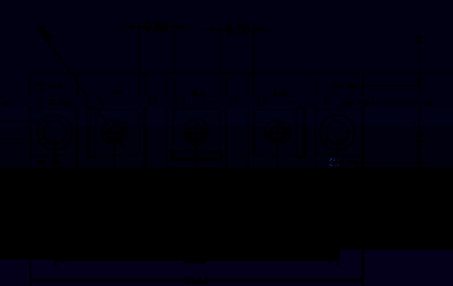
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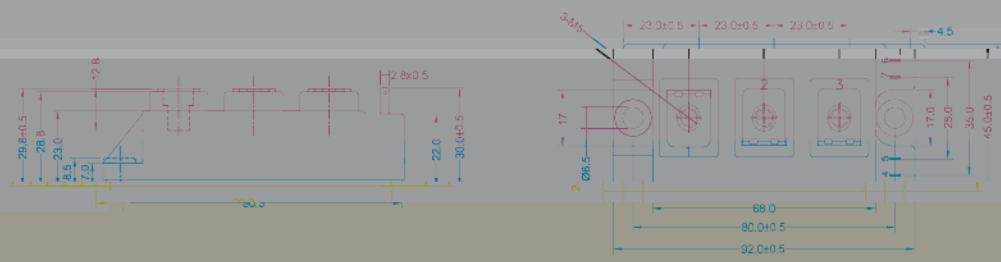
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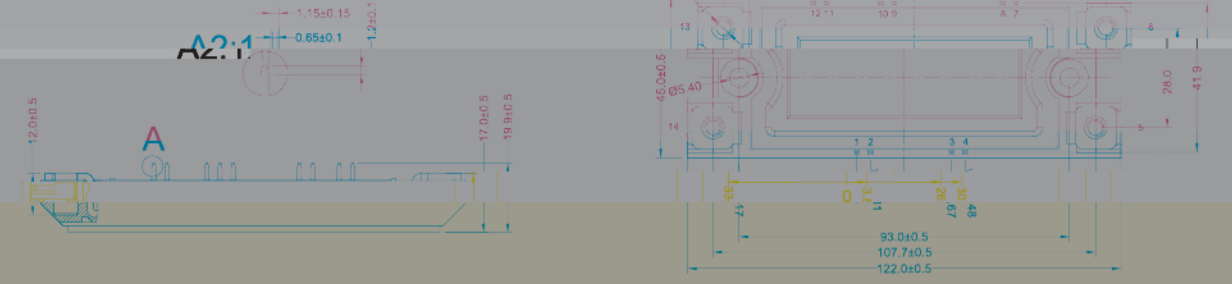
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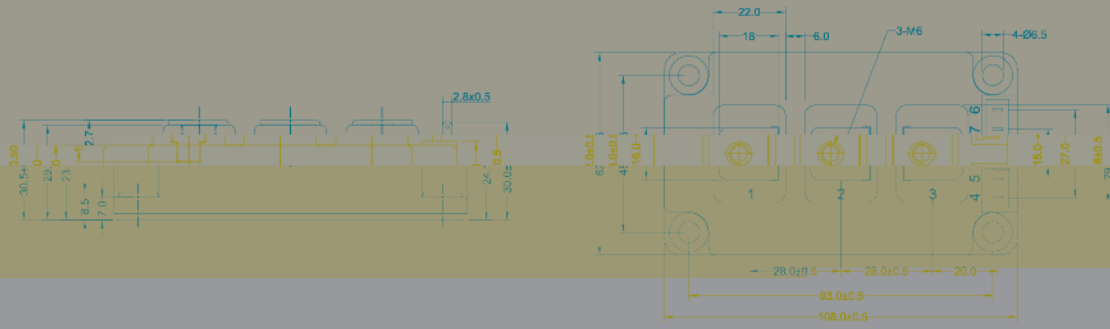
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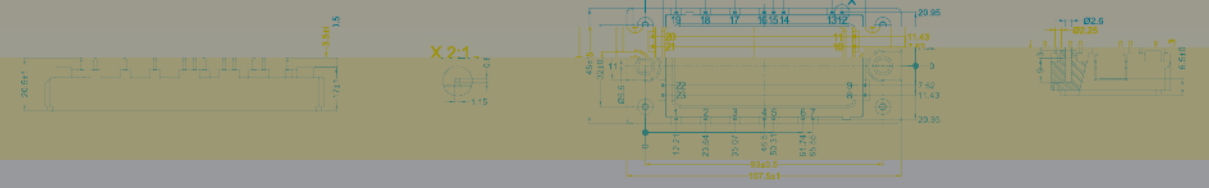
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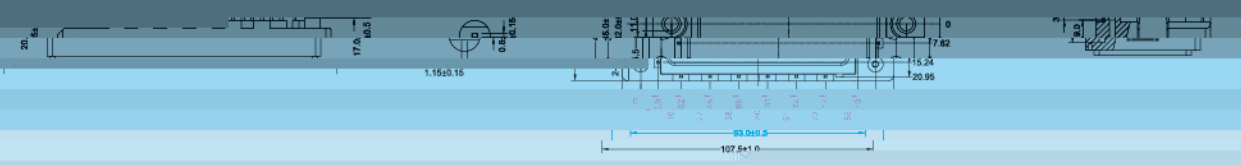
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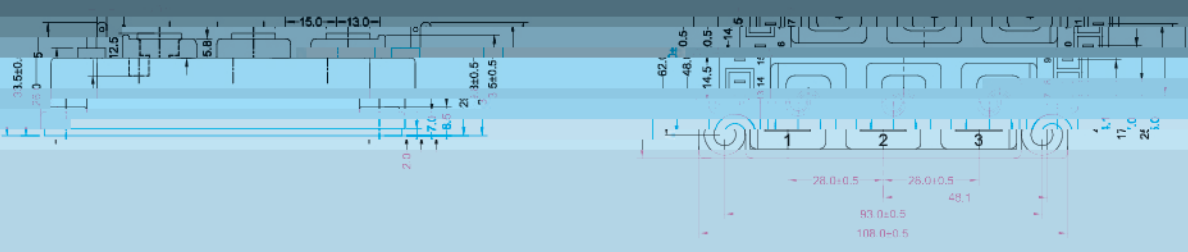
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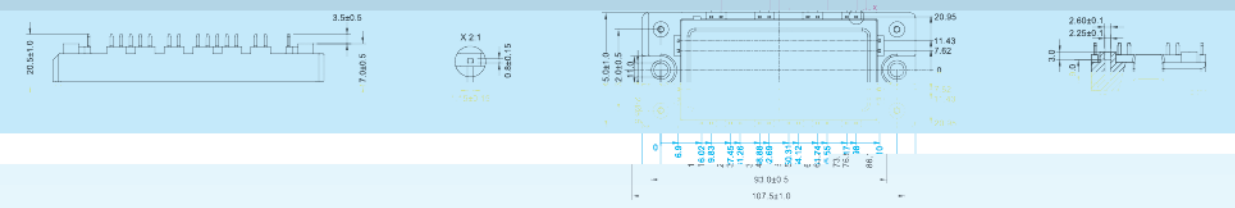
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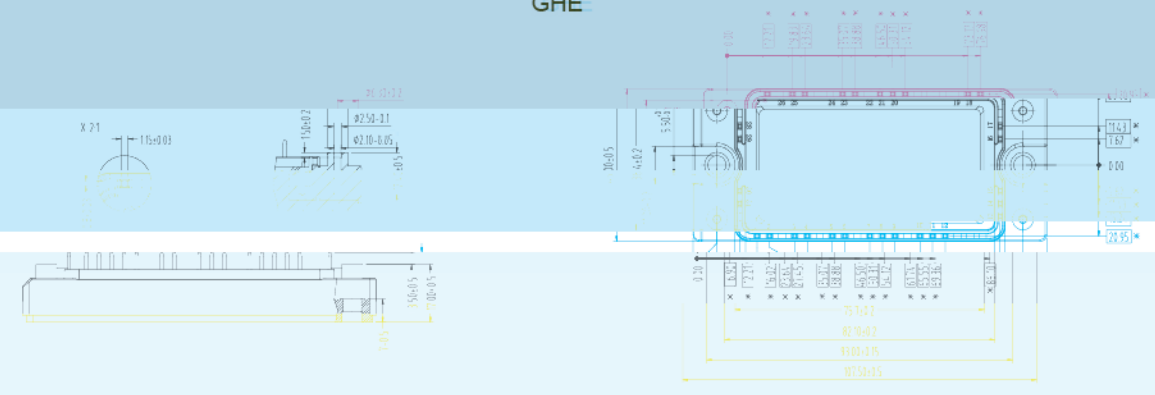
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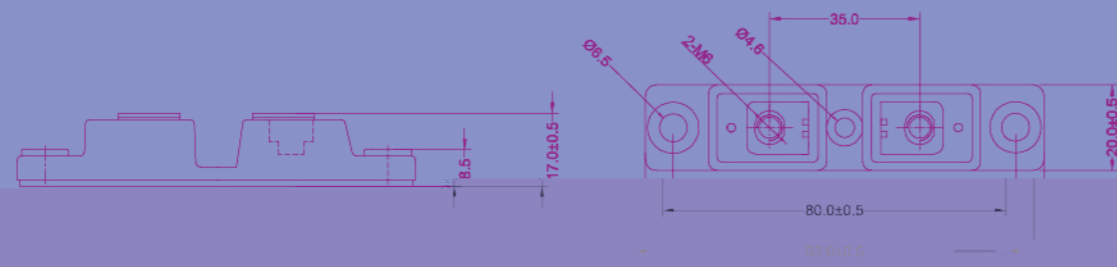
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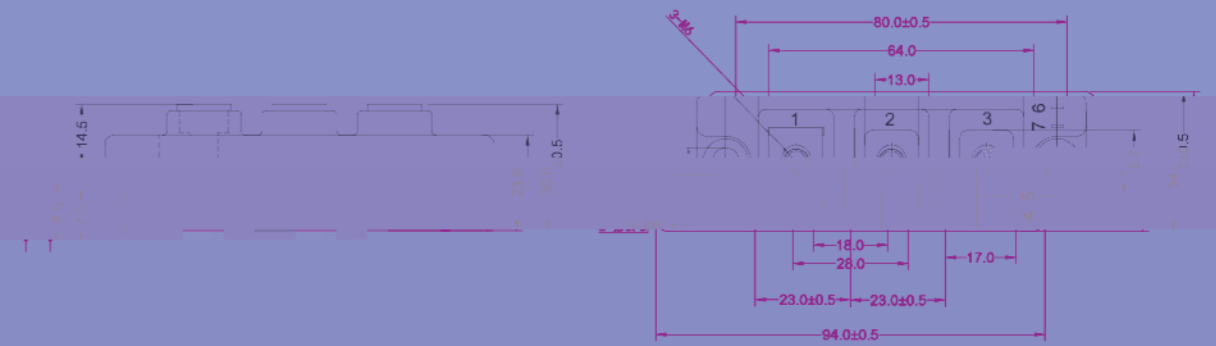
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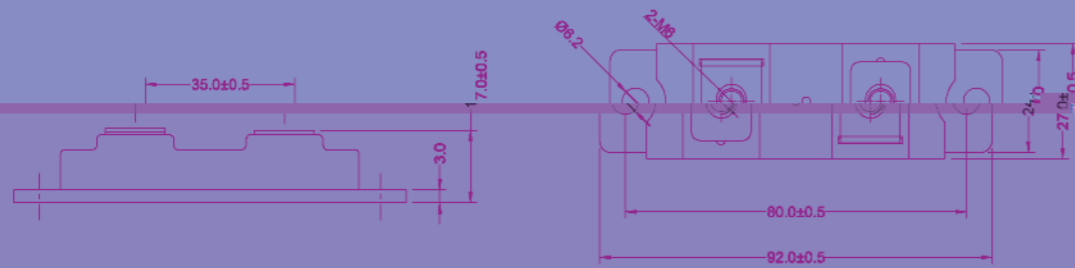
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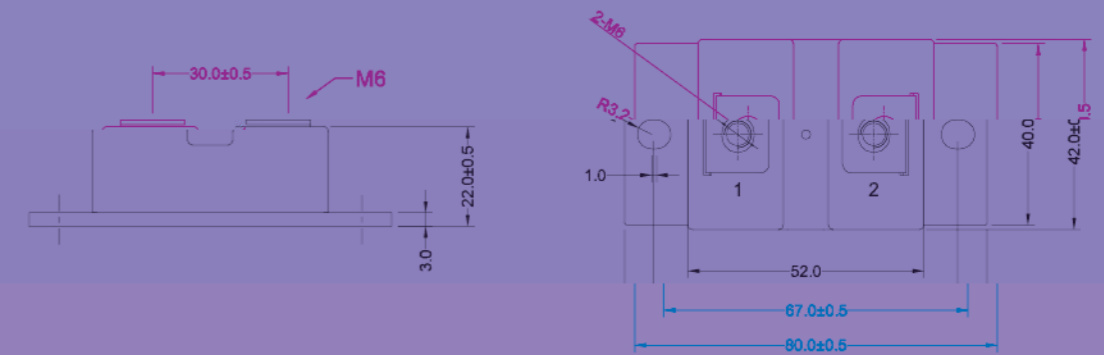
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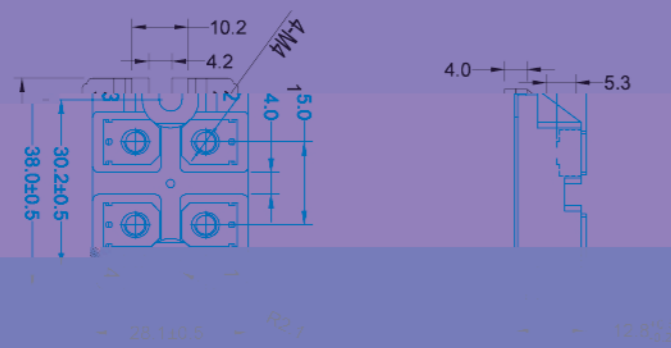
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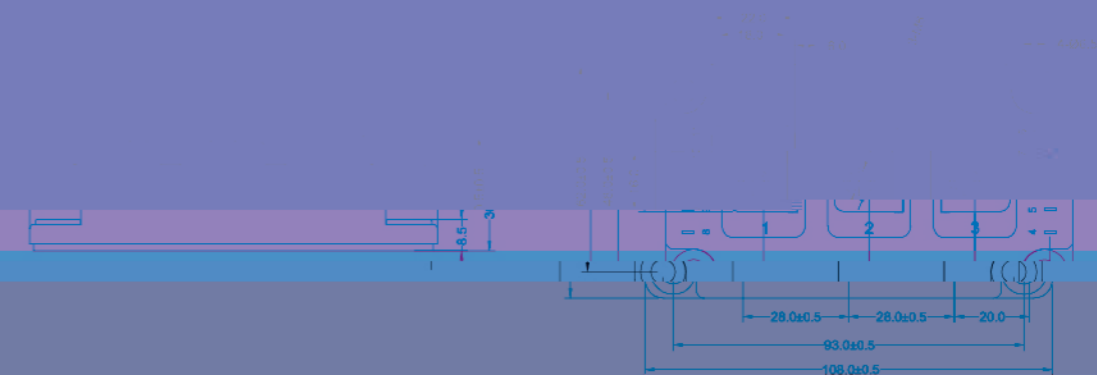
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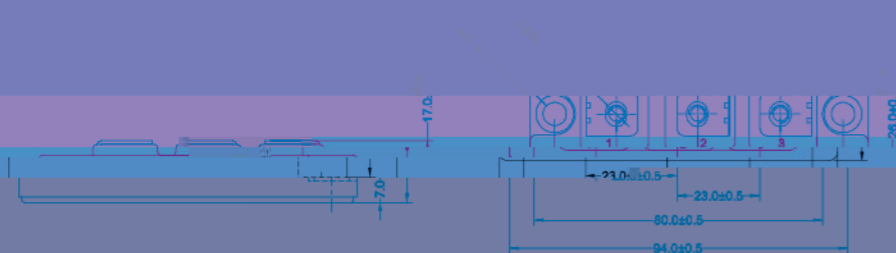
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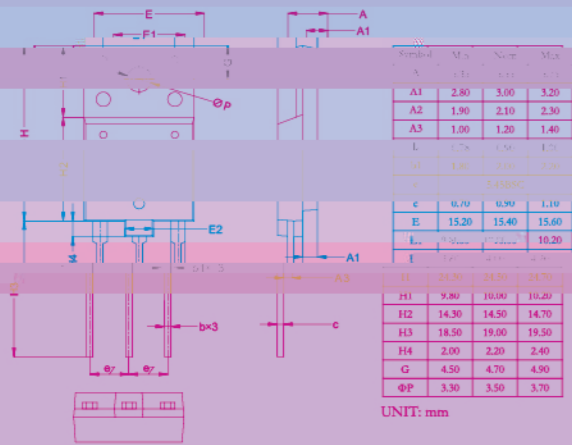
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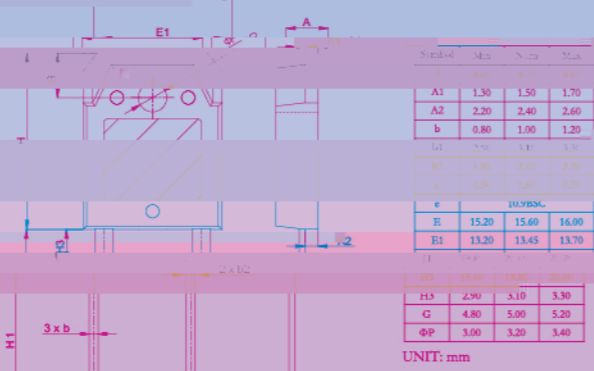
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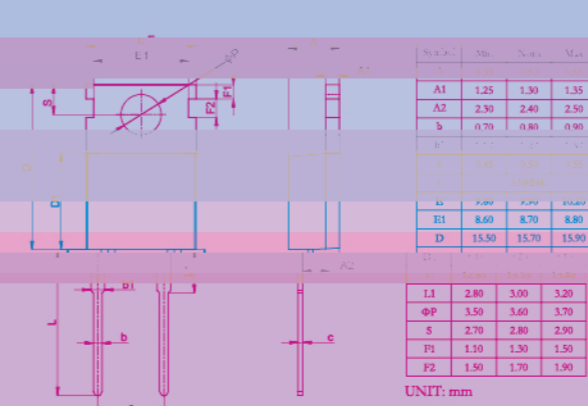
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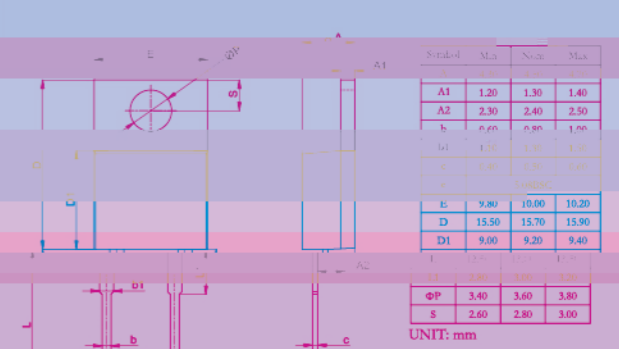
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TO-220B-2L



TO-220C-2L



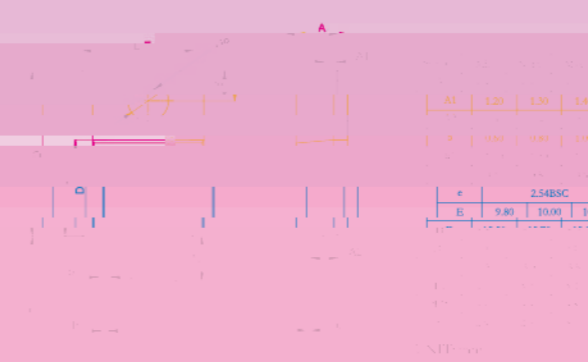
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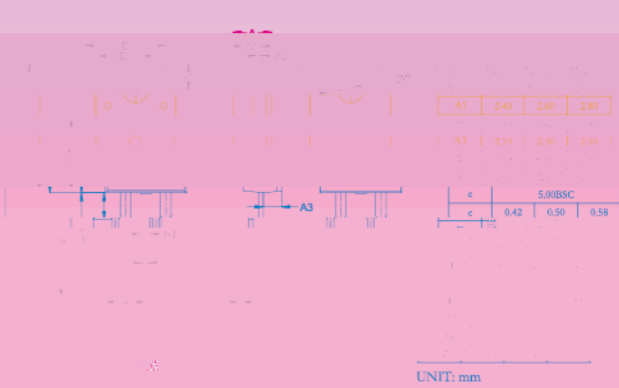
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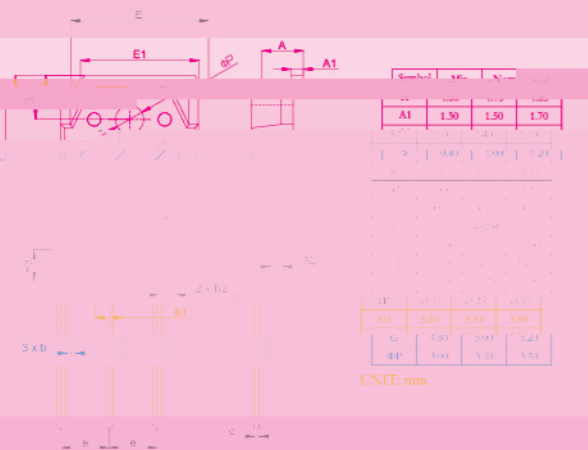
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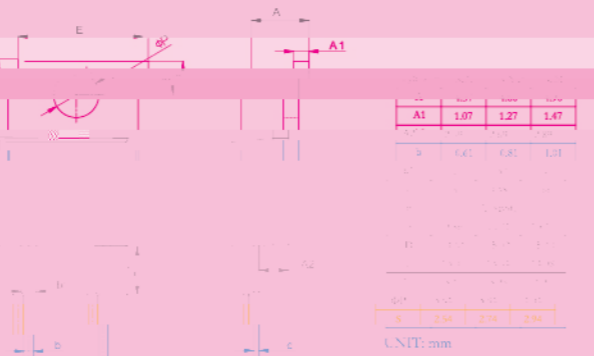
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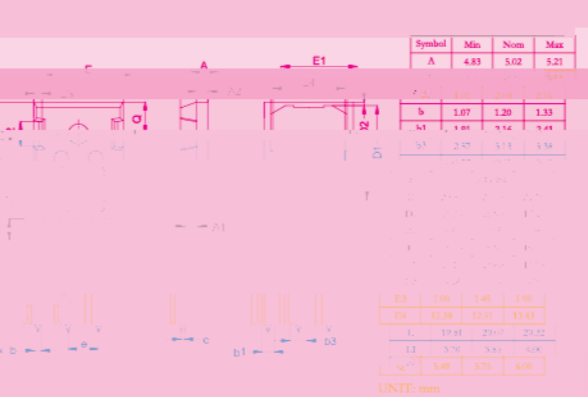
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TO-220A-2L



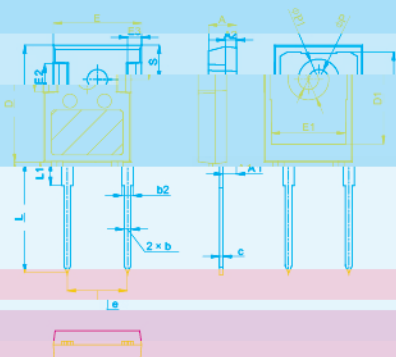
TO-247 Plus-3L



TO-247 Plus-4L



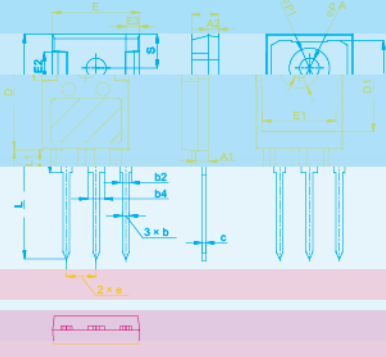
TO-247-2L



Symbol	Min	Nom	Max
A	4.80	5.00	5.21
A1	2.21	2.41	2.61
A2	1.85	2.00	2.16
b	1.07	1.25	1.36
b2	1.90	2.05	2.41
c	0.50	0.60	0.75
e	6.15BSC		
E	15.50	15.80	16.13
E1	12.38	13.30	13.60
E2	3.68	-	5.20
E3	1.00	-	2.70
D	20.70	21.00	21.30
D1	16.25	-	17.65
L	19.60	19.91	20.32
L1	-	-	4.40
φP	3.40	3.60	3.80
S	-	-	7.30

UNIT: mm

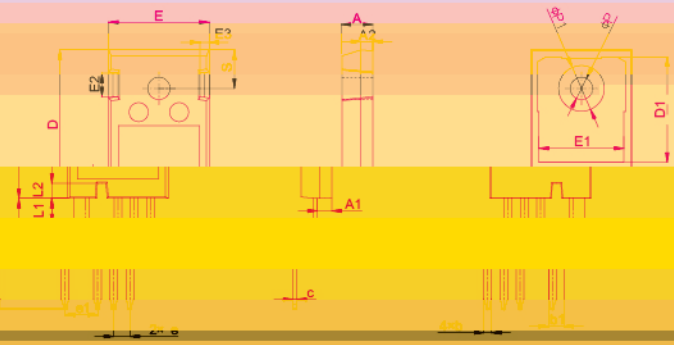
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Symbol	Min	Nom	Max
A	4.80	5.00	5.21
A1	2.21	2.41	2.61
A2	1.85	2.00	2.16
b	1.07	1.25	1.36
b2	1.90	2.05	2.41
b4	2.87	3.05	3.38
c	0.50	0.60	0.75
e	6.15BSC		
E	15.50	15.80	16.13
E1	12.38	13.30	13.60
E2	3.68	-	5.20
E3	1.00	-	2.70
D	20.70	21.00	21.30
D1	16.25	-	17.65
L	19.60	19.91	20.32
L1	-	-	4.40
φP	3.40	3.60	3.80
S	-	-	7.30

UNIT: mm

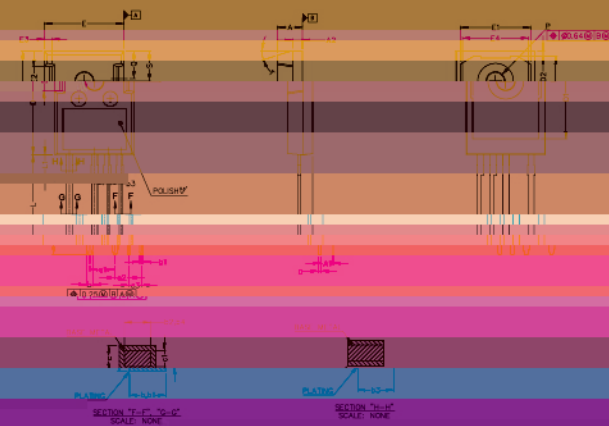
TO-247-4L



Symbol	Min	Nom	Max
A	4.83	5.00	5.21
A1	2.29	2.41	2.54
A2	2.21	2.00	2.14
b	1.07	1.25	1.40
b1	2.39	2.47	2.94
c	0.55	0.60	0.68
e	6.15BSC		
E	15.75	15.94	16.13
E1	12.38	13.91	13.43
E2	3.68	4.39	5.10
E3	1.00	1.14	1.80
L1	3.97	4.17	4.37
L2	2.55	2.90	3.40
φP	3.50	3.60	3.80
S	4.64	4.77	4.90

UNIT: mm

TO-247 LP-4L



MILLIMETERS			
Symbol	Min	Nom	Max
A	4.83	5.00	5.21
A1	2.29	2.54	-
A2	1.91	2.10	-
b	0.65	0.75	-
b1	0.80	0.79	-
b2	1.50	1.38	-
b3	1.34	1.44	-
b4	0.65	0.74	-
c	0.55	0.65	-
D	20.80	21.10	-
D1	16.25	17.65	-
E	15.75	16.73	-
E1	13.10	14.10	-
E2	3.68	4.60	-
E3	1.00	1.20	-
E4	13.50	15.00	-
e1	6.08 BSC		
L1	3.97	4.37	-
φP	3.51	3.65	-
S	4.65	4.90	-
T	0.50	0.30	-
T1	17.5°	16.5°	-

UNIT: mm

