

# Power Semiconductor Module

# Leading Solution

In the field of electric power solutions, producing a wide variety of products that are based on power supply technology and are highly competitive both in Korea and overseas.

Using technology that it has accumulated over more than 30 years in the electric power industry, LSIS develops, produces, and supplies a whole range of products related to power plants, power transmission & distribution, equipment for electricity users, and electric power it to overseas markets as well as within Korea.

LSIS electric equipment products are developed under the quality-first principle. Year on year, its sales in the global market have increased by 30 to 40 percent.

LSIS develops and produces various products in the field of power solutions.

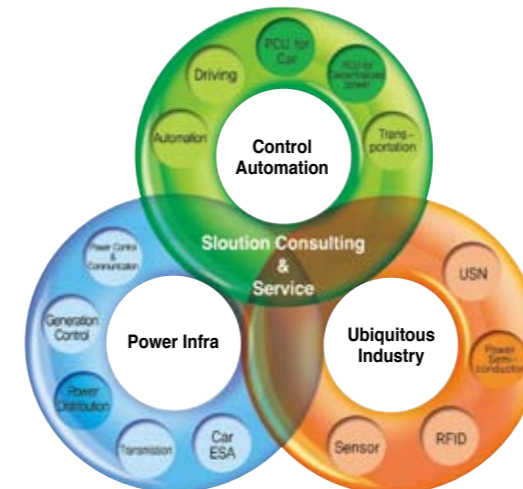
## Power Semiconductor Module.

### Optimize your application designs : Less power loss! Save cost and time!

LSIS sets the long term goal as "Total solution provider in power semiconductors", providing system solutions based on power semiconductors. LSIS is now producing and going to develop a low-cost and high-performance **Power Semiconductor Modules** for Industry applications, Power supplies, Renewable energy, Automotive and Home appliances.

### Our product portfolio includes:

- **Application Specific Power Module**
  - Simple Solution Power Module(SISPM™)
    - IGBT : 4-Pack
    - MOSFET : 2-Pack, 4-Pack, 6-Pack
  - Eco Friendly Power Module(EFPM™)
    - MOSFET : 2-Pack, 6-Pack
- **Standard Power Module**
  - Super Solution Power Module(SUSPM™)
    - IGBT : 1-Pack, 2-Pack, Chopper
    - DIODE : Single, Series, Common Cathode, Common Anode
  - Simple Solution Power Module(SISPM™)
    - IGBT : 1Φ CI, 3Φ CI, 1Φ CIB, 3Φ CIB, 6-Pack



LSIS is continually discovering the new industry for the future and industrializing it.



Head Office\_Anyang City, Korea



R&D Center\_Anyang City, Korea



Manufacturing Plant\_Cheonan City, Korea



Manufacturing Line\_Cheonan City, Korea



## Standard IGBT Modules

# SUSPM™ Super Solution Power Modules

1-Pack, 2-Pack and Buck/Boost chopper SUSPM™ product lines for industrial applications.

These power modules are compact design with flexibility and optimized performance for each application with high reliability, which meets customers' requirements.

SUSPM™ product lines offer three standard package types (34mm, 48mm, 62mm) with the latest IGBT technology. And they cover the current range from 50A (@Tc≥80°C) to 400A (@Tc≥80°C) at 600V, 1200V and 1700V.

LS Industrial Systems provides two types of products. One is with ESD protection between Gate and Emitter, the other is without ESD protection.

### Features

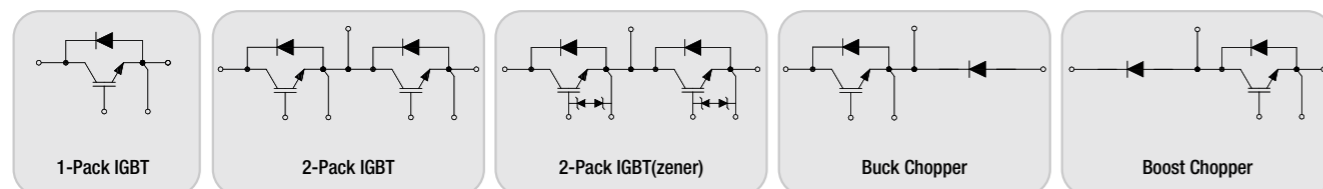
- Optimized characteristics for each applications
- Embedded ESD protection function (Option)
- Very low  $V_{CE(sat)}$  with positive temperature coefficient

### Application

- Industrial Motor Drives
- Welding machine
- Power supplies (including UPS)
- Induction Heating
- Medical



### SUSPM™ Topology





## Special Functions

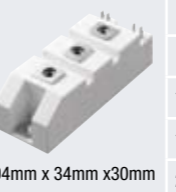


### ESD Protection

- Protection the gate from the failure due to Electrostatic Discharge (ESD)

### 1-Pack / Chopper IGBT Modules

	Configuration	600V		1200V				
		Trench F/S	Trench F/S	Trench F/S	SPT+	Trench F/S		
<b>SUSPM1</b>  94mm x 34mm x 30mm	Chopper -BO : BOOST -BU : BUCK	75A	LUR75G604B0 LUR75G604BU		LUR75G1204B0 LUR75G1204BU			
		100A	LUR100G604B0 LUR100G604BU		LUR100G1204B0 LUR100G1204BU			
		150A	LUR150G604B0 LUR150G604BU		LUR150G1204B0 LUR150G1204BU			
		200A	LUR200G604B0 LUR200G604BU					
<b>SUSPM3</b>  108mm x 62mm x 30mm	Chopper -BO : BOOST -BU : BUCK	150A			LWR150G1204B0 LWR150G1204BU			
		200A	LWR200G604B0 LWR200G604BU		LWR200G1204B0 LWR200G1204BU			
		300A	LWR300G604B0 LWR300G604BU		LWR300G1204B0 LWR300G1204BU			
		400A	LWR400G604B0 LWR400G604BU				LWR400G1207B0 LWR400G1207BU	
	1-Pack IGBT	200A						
		300A						LWA300G1207
		400A						LWA400G1207
		600A		LWA600G603				

### 2-Pack IGBT Modules

	Configuration	600V		1200V			1700V		
		Planar NPT	Trench F/S	Planar NPT	Trench F/S	SPT+	Trench F/S	Trench F/S	
<b>SUSPM1</b>  94mm x 34mm x 30mm		50A			LUH50G1202Z	LUH50G1204	LUH50G1201Z		LUH50G1703Z
		75A	LUH75G602Z	LUH75G604	LUH75G1202Z	LUH75G1204	LUH75G1201Z	LUH75G1203Z	LUH75G1703Z
		100A	LUH100G602Z	LUH100G604	LUH100G1202Z	LUH100G1204	LUH100G1201Z	LUH100G1203Z	
		150A		LUH150G604		LUH150G1204			
		200A		LUH200G604					
<b>SUSPM2</b>  94mm x 48mm x 30mm		100A							LWH100G1703Z
		150A	LWH150G602Z		LWH150G1202Z	LWH150G1204	LWH150G1201Z	LWH150G1203Z	LWH150G1703Z
		200A	LWH200G602Z		LWH200G1202Z	LWH200G1204	LWH200G1201Z	LWH200G1203Z	
		300A		LWH300G604					
<b>SUSPM3</b>  108mm x 62mm x 30mm		100A			LWH100G1202	LWH100G1204	LWH100G1201		
		150A			LWH150G1202	LWH150G1204	LWH150G1201	LWH150G1203	
		200A			LWH200G1202	LWH200G1204	LWH200G1201	LWH200G1203	LWH200G1703
		300A		LWH300G604		LWH300G1204	LWH300G1201	LWH300G1203	LWH300G1703
400A		LWH400G604					LWH400G1207		



## Standard Diode Modules

# SUSPM™ Super Solution Power Modules

Standard diode modules based on SUSPM™ provide design flexibility and optimized performance for welding machines and power supplies with high reliability. Two types of package (34mm and 48mm) with latest diode technology cover current range from 150A to 300A at 600V.

### Features

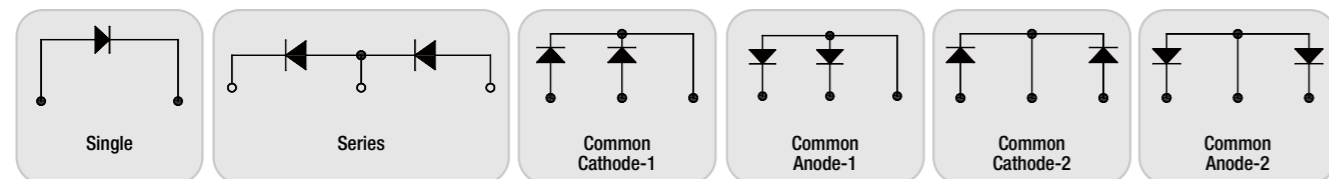
- Very low forward voltage drop
- Ultra fast and soft reverse recovery

### Application



- Welding Machine
- Power Supply



### Diode module Topology



### Diode Modules

			Configuration	Common Terminal	600V
SUSPM1	 94mm x 34mm x 30mm	150A	Common Cathode	1	LUF150D60C1
				2	LUF150D60C2
		200A	Common Anode	1	LUF150D60A1
				2	LUF150D60A2
		300A	Single	1	LUF200D60C1
				2	LUF200D60C2
SUSPM2	 94mm x 48mm x 30mm	300A	Common Cathode	1	LUF200D60A1
				2	LUF200D60A2
		300A	Common Anode	1	LVF300D60C1
				2	LVF300D60C2
		300A	Series	1	LVF300D60A1
				2	LVF300D60A2
					LVF300D60S1



## Standard IGBT Power Modules

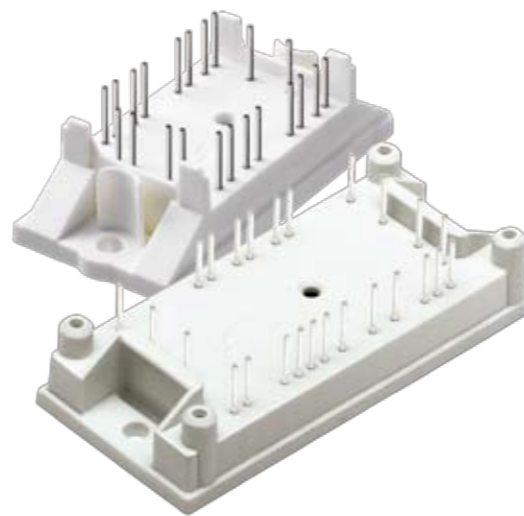
# SISPM™ Simple Solution Power Modules

## CI / CIB Modules

CI and CIB SISPM™ Product lines for motor drive applications.

SISPM™ CIB modules have compact design with flexibility and optimized performance for each application with high reliability, which meets customers' requirements. SISPM™ product Line-up with two package types of SISPM0 and SISPM1 cover current range from 6A to 50A (@Tc ≥ 80°C) at 600V and 1200V. SISPM™ product Line-up with two different topologies cover various customer system requirements

- CI : 1Φ or 3Φ Converter + Inverter
- CIB : 1Φ or 3Φ Converter + Brake + Inverter



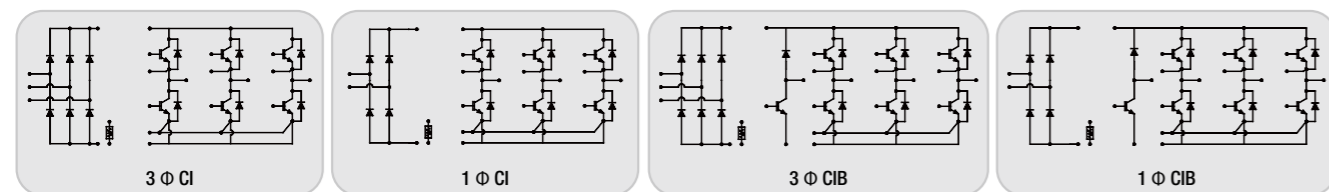
### Features

- Various configurations
- The latest IGBT technology
- Operation frequency
  - Inverter & Brake up to 15kHz

### Application

- General Purpose Inverter
- Servo Drive
- Sewing Machine
- Treadmill

### CI & CIB Modules Topology



### CI IGBT Modules

SISPM0 (17mm)	55mm x 32.6mm x 17mm	8A 10A 15A 20A 25A	3Φ	CI	600V		1200V	
					Trench F/S	Trench F/S	Planar NPT	Trench F/S
					Low Vce(sat) Low Eoff	Low Vce(sat)	Low Eoff	Low Vce(sat)
								LFP8G1207
								LFP15G1207
SISPM1 (17mm)	82mm x 37.4mm x 17mm	8A 10A 15A 20A	1Φ	CI		LEL15G604		

### CIB (PIM) IGBT Modules

SISPM0 (17mm)	55mm x 32.6mm x 17mm	4A 6A 8A 10A 15A 20A 30A	3Φ	CIB (PIM)	600V		1200V	
					Trench F/S	Trench F/S	Planar NPT	Trench F/S
					Low Vce(sat) Low Eoff	Low Vce(sat)	Low Eoff	Low Vce(sat)
						LFC6G603		LFC4G1207
						LFC10G603		LFC8G1207
						LFC15G603		LFC10G1207
						LFC20G603		
						LFC30G603		
SISPM1 (17mm)	82mm x 37.4mm x 17mm	4A 6A 10A 15A 20A 25A 30A 50A	3Φ	CIB (PIM)		LEC6G604		
						LEC10G604		LEC10G1207
						LEC15G604		LEC15G1207
						LEC20G604		
								LEC25G1207
							LEC30G603	
							LEC50G603	



## Application Specific Power Modules

**SISPM™** Simple Solution Power Modules

# Application Specific Power Modules

2-Pack, 4-Pack and 6-Pack Application Specific Product lines based on SISPM™ for Power supplies , welding machines, battery vehicles and charger applications

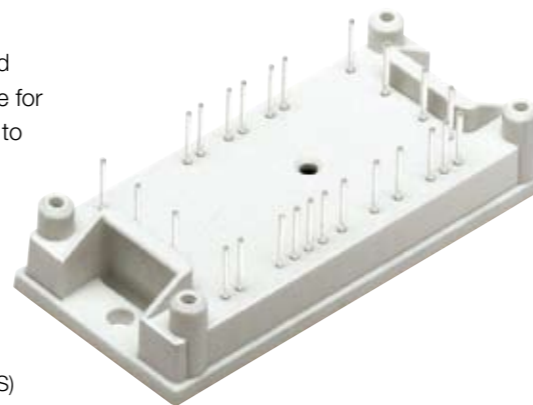
Application Specific Power Modules are consisted of MOSFETs or IGBTs and enable customers design products compact, flexible, optimized performance for each application with high reliability. SISPM1 covers current range from 30A to 400A(@Tc ≥ 80°C) at 75V, 100V, 150V, 500V, 600V, 900V and 1200V

### Features

- Latest MOSFET and IGBT Technology
- Very low Rds(on)
- Operation frequency
  - MOSFET Modules : Up to 100kHz
  - IGBT Modules : Up to 40kHz
- Included temperature sensor

### Application

- Battery Vehicles
- Battery Charger
- Power Supplies (including UPS)
- Welding machine
- Solar Energy



### 2-PACK MOSFET Modules

			75V	100V	150V	
SISPM1	82mm x 37.4mm x 17mm		100A		LEH100M156	
			200A	LEH200M076	LEH200M106	LEH200M156
			400A	LEH400M076	LEH400M106	

### 4-Pack MOSFET Modules

			500V	900V
SISPM1	82mm x 37.4mm x 17mm		30A	LEF30M90T
			45A	LEF45M50T
			60A	LEF60M50T

### 6-Pack MOSFET Modules

			75V	100V	150V
SISPM1	82mm x 37.4mm x 17mm		100A		LEI100M156
			200A	LEI200M076	LEI200M106

### 4-Pack IGBT Modules

			600V	1200V	
			Planar NPT	Planar NPT	
SISPM1	82mm x 37.4mm x 17mm		50A	LEF50G602	LEF50G1202
			75A	LEF75G602	LEF75G1202
			100A	LEF100G602	



## Application Specific Power Modules

# EFPM™ Eco Friendly Power Modules

## EFPM1

EFPM™ product line for Battery Vehicle, Solar energy and Power supplies.

These power modules are consisted of MOSFETs and meet customers' requirements for compact design, flexibility, and optimized performance for each application with high reliability. EFPM1 covers the different current range from 300A to 600A(@Tc ≥ 80°C) at 75V, 100V and 150V

### Features

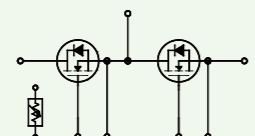
- Low loss & High ruggedness MOSFET
  - Low RDS(ON)
  - Enhanced body diode dv/dt, di/dt capability
  - Improved gate, avalanche, dynamic dv/dt ruggedness
- Half bridge configuration
- Insulated package without copper base plate
- Fully characterized capacitance & avalanche SOA
- Included temperature sensor

### Application

- Battery Vehicles and charger
- Solar Energy
- Power supplies



### 2-PACK MOSFET Modules

		75V	100V	150V
EFPM1		300A		LMH300M156
		400A		LMH400M156
		500A		LMH500M156
		600A	LMH600M076	LMH600M106

## EFPM2

EFPM™ product line for Battery Vehicle, Solar energy and Power supplies

These power modules are consisted of MOSFETs, which meet the customers' requirements for compact design, flexibility and optimized performance for each application with high reliability. EFPM2 covers the different current range from 200A to 800A (@Tc=80°C) at 75V, 100V and 150V

### Features

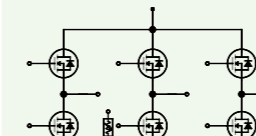
- Low loss & High ruggedness MOSFET
  - Low RDS(ON)
  - Enhanced body diode dv/dt, di/dt capability
  - Improved gate, avalanche, dynamic dv/dt ruggedness
- 6-pack configuration
- Insulated package with copper base plate
- Fully characterized capacitance & avalanche SOA
- Included temperature sensor

### Application

- Battery Vehicles and charger
- Solar Energy
- Power supplies



### 2-PACK MOSFET Modules

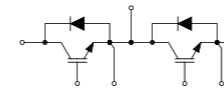
		75V	100V	150V	
EFPM2		200A		LNI200M156	
		300A		LNI300M156	
		400A	LNI400M076	LNI400M106	LNI400M156
		600A	LNI600M076	LNI600M106	
		800A	LNI800M076	LNI800M106	




\* Note) Red color : MP from Dec. 2012

## For Welding Machines




### 2-Pack IGBT Modules




		600V		1200V			1700V		
		Planar NPT	Trench F/S	Planar NPT	Trench F/S	SPT+	Trench F/S	Trench F/S	
		Low Eoff	Low Vce(sat) Low Eoff	Low Eoff	Low Vce(sat) Low Eoff	Low Vce(sat)	Low Vce(sat)	Low Vce(sat)	
<b>SUSPM1</b>	 94mm x 34mm x 30mm	50A			LUH50G1202Z	LUH50G1204	LUH50G1201Z		LUH50G1703Z
		75A	LUH75G602Z	LUH75G604	LUH75G1202Z	LUH75G1204	LUH75G1201Z	LUH75G1203Z	LUH75G1703Z
		100A	LUH100G602Z	LUH100G604	LUH100G1202Z	LUH100G1204	LUH100G1201Z	LUH100G1203Z	
		150A		LUH150G604		LUH150G1204			
		200A		LUH200G604					
<b>SUSPM2</b>	 94mm x 48mm x 30mm	100A							LWH100G1703Z
		150A	LWH150G602Z		LWH150G1202Z	LWH150G1204	LWH150G1201Z	LWH150G1203Z	LWH150G1703Z
		200A	LWH200G602Z		LWH200G1202Z	LWH200G1204	LWH200G1201Z	LWH200G1203Z	
		300A		LWH300G604					
		400A		LWH400G604					
<b>SUSPM3</b>	 108mm x 62mm x 30mm	100A			LWH100G1202	LWH100G1204	LWH100G1201		
		150A			LWH150G1202	LWH150G1204	LWH150G1201	LWH150G1203	
		200A			LWH200G1202	LWH200G1204	LWH200G1201	LWH200G1203	LWH200G1703
		300A		LWH300G604		LWH300G1204	LWH300G1201	LWH300G1203	LWH300G1703
		400A		LWH400G604					LWH400G1207

### 4-Pack IGBT Modules

				600V	1200V
				Planar NPT	Planar NPT
				<b>SISPM1</b>	 82mm x 37.4mm x 17mm
75A	LEF75G602	LEF75G1202			
100A	LEF100G602				

### 4-Pack MOSFET Modules



				500V	900V
				Planar GATE	Planar GATE
				<b>SISPM1</b>	 82mm x 37.4mm x 17mm
45A	LEF45M50T				
60A	LEF60M50T				

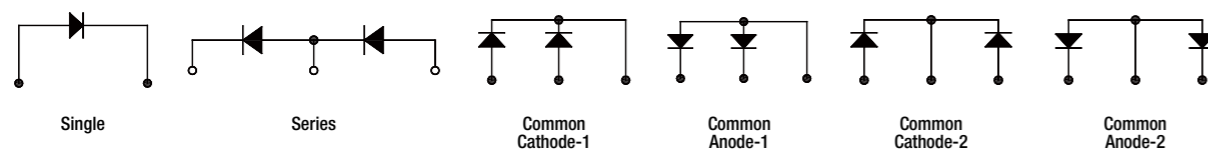
### LSIS Module Application

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For Industrial Motor Drive	19 page
Battery Vehicle Application	20 page

## For Welding Machines




### Diode Modules

			Configuration	Common Terminal	600V
SUSPM1		150A	Common Cathode	1	LUF150D60C1
				2	LUF150D60C2
			Common Anode	1	LUF150D60A1
				2	LUF150D60A2
		200A	Common Cathode	1	LUF200D60C1
				2	LUF200D60C2
300A	Common Anode	1	LUF200D60A1		
		2	LUF200D60A2		
SUSPM2		300A	Common Cathode	1	LVF300D60C1
				2	LVF300D60C2
			Common Anode	1	LVF300D60A1
				2	LVF300D60A2
		300A	Series		LVF300D60S1

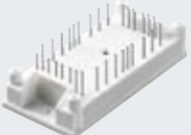


## For High Frequency Application (including IH)

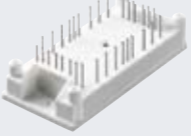
### 2-Pack IGBT Modules

		600V		1200V			
		Planar NPT	Trench F/S	Planar NPT	Trench F/S	Trench F/S	
		Low Eoff	Low Vce(sat) Low Eoff	Low Eoff	Low Vce(sat) Low Eoff	Low Vce(sat)	
SUSPM1		50A		LUH50G1202Z	LUH50G1204		
		75A	LUH75G602Z	LUH75G604	LUH75G1202Z	LUH75G1204	
		100A	LUH100G602Z	LUH100G604	LUH100G1202Z	LUH100G1204	
		150A		LUH150G604		LUH150G1204	
		200A		LUH200G604			
SUSPM2		150A	L VH150G602Z		L VH150G1202Z	L VH150G1204	
		200A	L VH200G602Z		L VH200G1202Z	L VH200G1204	
		300A		L VH300G604			
		400A		L VH400G604			
SUSPM3		100A		L WH100G1202	L WH100G1204		
		150A		L WH150G1202	L WH150G1204		
		200A		L WH200G1202	L WH200G1204		
		300A		L WH300G604		L WH300G1204	
		400A		L WH400G604		L WH400G1207	

### 4-Pack IGBT Modules

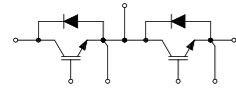
		600V		1200V	
		Planar NPT		Planar NPT	
SISPM1		50A	LEF50G602	LEF50G1202	
		75A	LEF75G602	LEF75G1202	
		100A	LEF100G602		

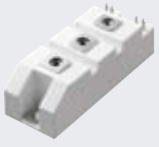


### 4-Pack MOSFET Modules

		500V		900V	
		Planar GATE		Planar GATE	
SISPM1		30A			LEF30M90T
		45A	LEF45M50T		
		60A	LEF60M50T		

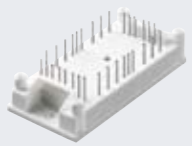
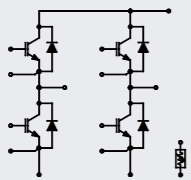
## For Power Supplies (including UPS)

### 2-Pack IGBT Modules

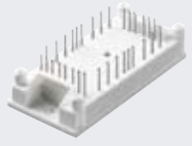
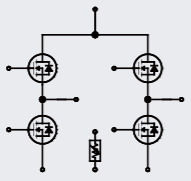


			600V			1200V				
			Planar NPT	Trench F/S	Trench F/S	Planar NPT	Trench F/S	SPT+	Trench F/S	
			Low Eoff	Low Vce(sat) Low Eoff	Low Vce(sat)	Low Eoff	Low Vce(sat) Low Eoff	Low Vce(sat)	Low Vce(sat)	
<b>SUSPM1</b>		94mm x 34mm x 30mm	50A			LUH50G1202Z	LUH50G1204	LUH50G1201Z		
			75A	LUH75G602Z	LUH75G604		LUH75G1202Z	LUH75G1204	LUH75G1201Z	LUH75G1203Z
			100A	LUH100G602Z	LUH100G604		LUH100G1202Z	LUH100G1204	LUH100G1201Z	LUH100G1203Z
			150A		LUH150G604					
			200A		LUH200G604					
<b>SUSPM2</b>		94mm x 48mm x 30mm	150A	LWH150G602Z			LWH150G1202Z	LWH150G1204	LWH150G1201Z	LWH150G1203Z
			200A	LWH200G602Z			LWH200G1202Z	LWH200G1204	LWH200G1201Z	LWH200G1203Z
			300A		LWH300G604	LWH300G603Z				
			400A		LWH400G604	LWH400G603Z				
<b>SUSPM3</b>		108mm x 62mm x 30mm	100A				LWH100G1202	LWH100G1204	LWH100G1201	
			150A				LWH150G1202	LWH150G1204	LWH150G1201	LWH150G1203
			200A				LWH200G1202	LWH200G1204	LWH200G1201	LWH200G1203
			300A		LWH300G604	LWH300G603		LWH300G1204	LWH300G1201	LWH300G1203
			400A		LWH400G604	LWH400G603				LWH400G1207

### 4-Pack IGBT Modules

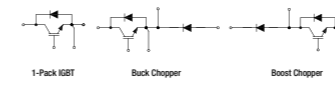
				600V		1200V	
				Planar NPT	Planar NPT	Planar NPT	Planar NPT
<b>SISPM1</b>		82mm x 37.4mm x 17mm		50A	LEF50G602		LEF50G1202
				75A	LEF75G602		LEF75G1202
				100A	LEF100G602		



### 4-Pack MOSFET Modules

				500V		900V	
				Planar GATE	Planar GATE	Planar GATE	Planar GATE
<b>SISPM1</b>		82mm x 37.4mm x 17mm		30A			LEF30M90T
				45A	LEF45M50T		
				60A	LEF60M50T		

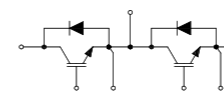
## For Industrial Motor Drives

### 1-Pack / Chopper IGBT Modules



			Configuration	600V		1200V		
				Trench F/S	Trench F/S	Trench F/S	SPT+	Trench F/S
				Low Vce(sat) Low Eoff	Low Vce(sat)	Low Vce(sat) Low Eoff	Low Vce(sat)	Low Vce(sat)
<b>SUSPM1</b>		94mm x 34mm x 30mm	Chopper -BO : BOOST -BU : BUCK	75A	LUR75G604B0 LUR75G604BU		LUR75G1204B0 LUR75G1204BU	
				100A	LUR100G604B0 LUR100G604BU		LUR100G1204B0 LUR100G1204BU	
				150A	LUR150G604B0 LUR150G604BU		LUR150G1204B0 LUR150G1204BU	
				200A	LUR200G604B0 LUR200G604BU			
				150A			LWR150G1204B0 LWR150G1204BU	
<b>SUSPM3</b>		108mm x 62mm x 30mm	Chopper -BO : BOOST -BU : BUCK	200A	LWR200G604B0 LWR200G604BU		LWR200G1204B0 LWR200G1204BU	
				300A	LWR300G604B0 LWR300G604BU		LWR300G1204B0 LWR300G1204BU	
				400A	LWR400G604B0 LWR400G604BU			LWR400G1207B0 LWR400G1207BU
				200A				
				300A				LWA300G1207
			1-Pack IGBT	400A				LWA400G1207
				600A		LWA600G603		


### 2-Pack IGBT Modules




				600V		1200V		1700V		
				Trench F/S	Trench F/S	Trench F/S	SPT+	Trench F/S	Trench F/S	
				Low Vce(sat) Low Eoff	Low Vce(sat)	Low Vce(sat) Low Eoff	Low Vce(sat)	Low Vce(sat)	Low Vce(sat)	
<b>SUSPM1</b>		94mm x 34mm x 30mm		50A			LUH50G1204	LUH50G1201Z	LUH50G1201Z	
				75A	LUH75G604	LUH75G603Z	LUH75G1204	LUH75G1201Z	LUH75G1203Z	LUH75G1703Z
				100A	LUH100G604	LUH100G603Z	LUH100G1204	LUH100G1201Z	LUH100G1203Z	
					LUH150G604	LUH150G603Z				
<b>SUSPM2</b>		94mm x 48mm x 30mm		100A					LWH100G1703Z	
				150A			LWH150G1204	LWH150G1201Z	LWH150G1203Z	LWH150G1703Z
				200A			LWH200G1204	LWH200G1201Z	LWH200G1203Z	
				300A	LWH300G604	LWH300G603Z				
				400A	LWH400G604	LWH400G603Z				
<b>SUSPM3</b>		108mm x 62mm x 30mm		100A			LWH100G1204	LWH100G1201		
				150A			LWH150G1204	LWH150G1201	LWH150G1203	
				200A			LWH200G1204	LWH200G1201	LWH200G1203	LWH200G1703
				300A	LWH300G604	LWH300G603	LWH300G1204	LWH300G1201	LWH300G1203	LWH300G1703
				400A	LWH400G604	LWH400G603			LWH400G1207	

## For Industrial Motor Drives

### CI IGBT Modules

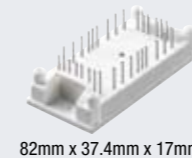

SISPM0 (17mm)		3Φ CI	Phase	Configuration	600V		1200V	
					Trench F/S	Trench F/S	Planar NPT	Trench F/S
					Low Vce(sat) Low Eoff	Low Vce(sat)	Low Eoff	Low Vce(sat)
8A	55mm x 32.6mm x 17mm	3Φ	CI					LFP8G1207
								LFP15G1207
10A	82mm x 37.4mm x 17mm	1Φ	CI					LEL15G604

### CIB (PIM) IGBT Modules


SISPM0 (17mm)		3Φ CIB	Phase	Configuration	600V		1200V		
					Trench F/S	Trench F/S	Planar NPT	Trench F/S	
					Low Vce(sat) Low Eoff	Low Vce(sat)	Low Eoff	Low Vce(sat)	
4A	55mm x 32.6mm x 17mm	3Φ	CIB (PIM)					LFC4G1207	
								LFC6G603	
								LFC8G1207	
								LFC10G603	LFC10G1207
								LFC15G603	
								LFC20G603	
6A	82mm x 37.4mm x 17mm	3Φ	CIB (PIM)					LEC6G604	
								LEC10G604	LEC10G1207
								LEC15G604	LEC15G1207
								LEC20G604	
25A								LEC25G1207	
30A								LEC30G603	
50A								LEC50G603	

## For Battery Vehicle Application


### 2-PACK MOSFET Modules for E-Scooter, Golf cars, NEV, Forklift and Charger

SISPM1		82mm x 37.4mm x 17mm	100A	200A	400A	Configuration	75V	100V	150V		
EFPM1		122mm x 45mm x 20.5mm	300A	400A	500A	2-PACK (Half-bridge)			LEH100M156		
									LEH200M076	LEH200M106	LEH200M156
									LEH400M076	LEH400M106	
									LMH300M156		
									LMH400M156		
									LMH500M156		
							LMH600M076	LMH600M106			

### 6-PACK MOSFET Modules for E-Scooter, Fan drive


SISPM1		82mm x 37.4mm x 17mm	100A	200A	Configuration	75V	100V	150V
								LEI100M156
						LEI200M076	LEI200M106	

### 6-PACK MOSFET Modules for Golf cars, NEV, Forklift

EFPM2		122mm x 45mm x 20.5mm	200A	300A	400A	600A	800A	Configuration	75V	100V	150V
											LNI200M156
											LNI300M156
									LNI400M076	LNI400M106	LNI400M156
									LNI600M076	LNI600M106	
									LNI800M076	LNI800M106	

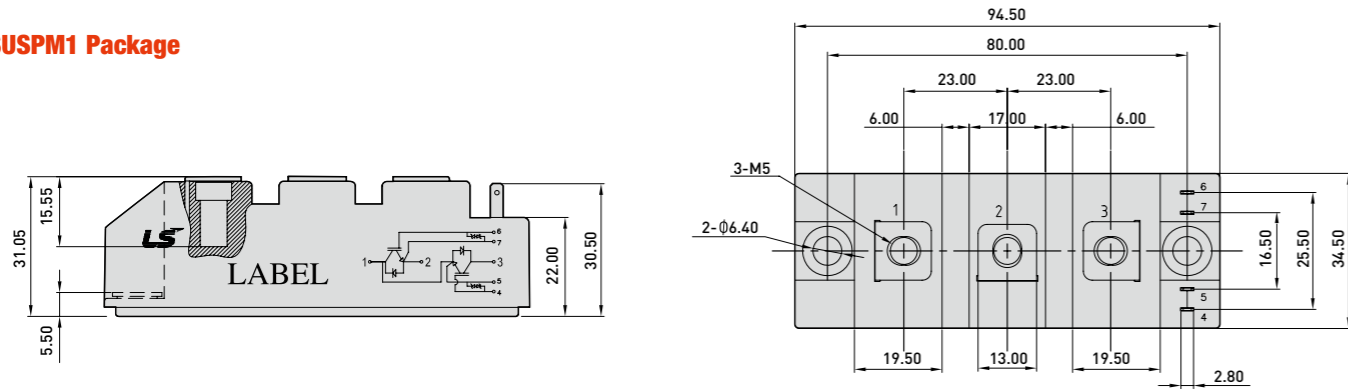
\* Note) Red color : MP from Dec. 2012

### 1/2-Pack IGBT Modules for EV Quick chargers

SUSPM3		108mm x 62mm x 30mm	200A	300A	400A	600A	200A	300A	400A	Configuration	600V		1200V		
											Trench F/S	Trench F/S	Trench F/S	SPT+	Trench F/S
											Low Vce(sat) Low Eoff	Low Vce(sat)	Low Vce(sat) Low Eoff	Low Vce(sat)	Low Vce(sat)
										1-Pack IGBT			LWA300G1207		
													LWA400G1207		
											LWA600G603				
										2-Pack IGBT	LWH300G604	LWH300G603	LWH300G1204	LWH300G1201	LWH300G1203
											LWH400G604	LWH400G603			LWH400G1207

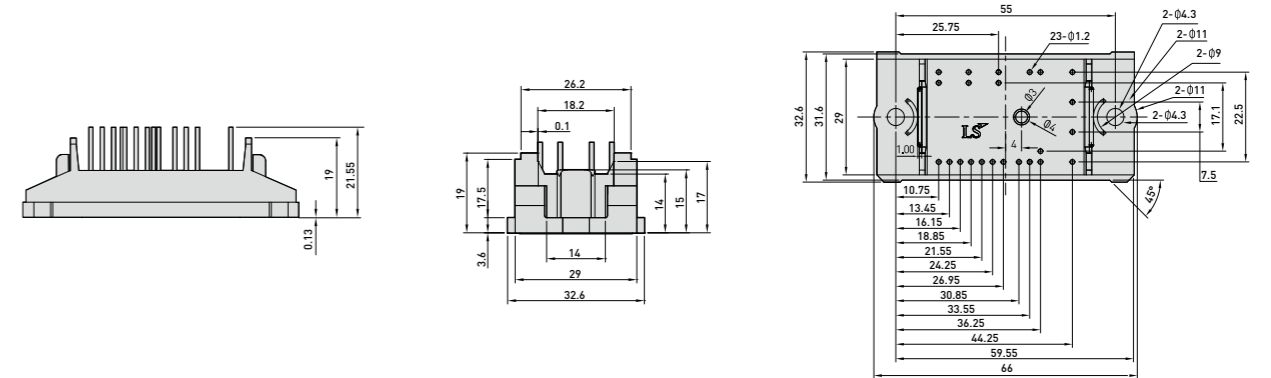
# SUSPM™ Package Dimension

**SUSPM1 Package**

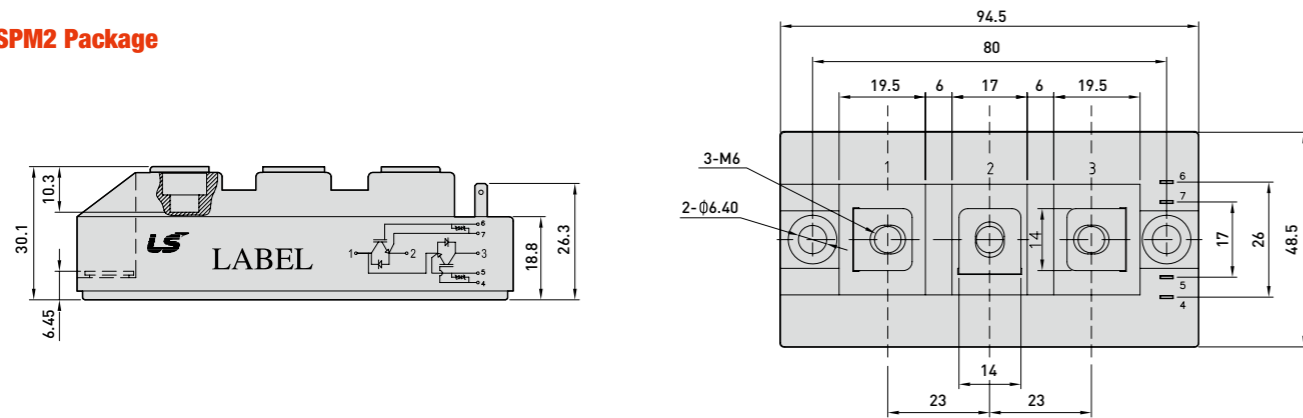


# SISPM™ Package Dimension

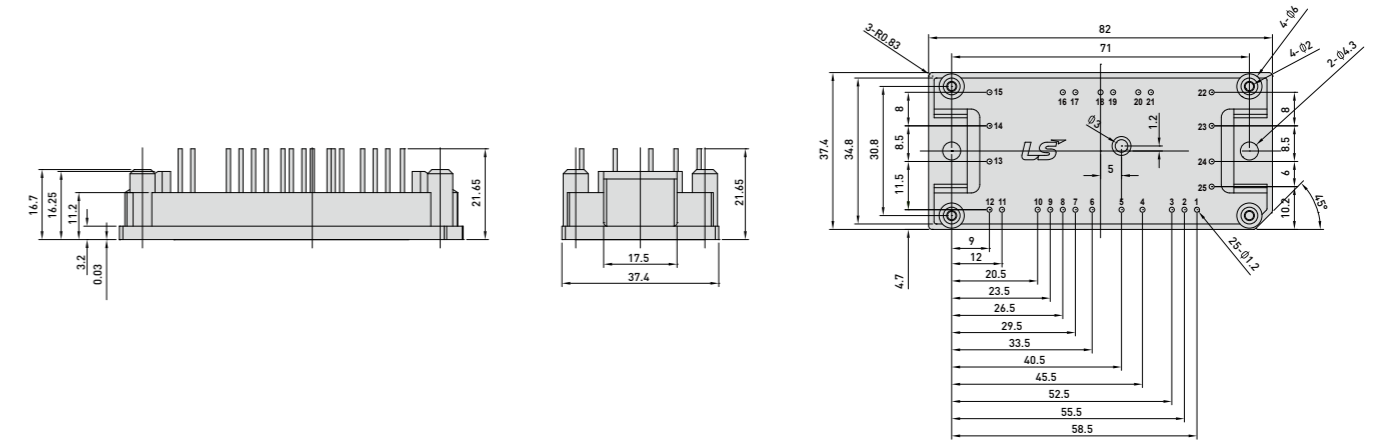
**SISPM0 3Ø CI / 3Ø CIB**



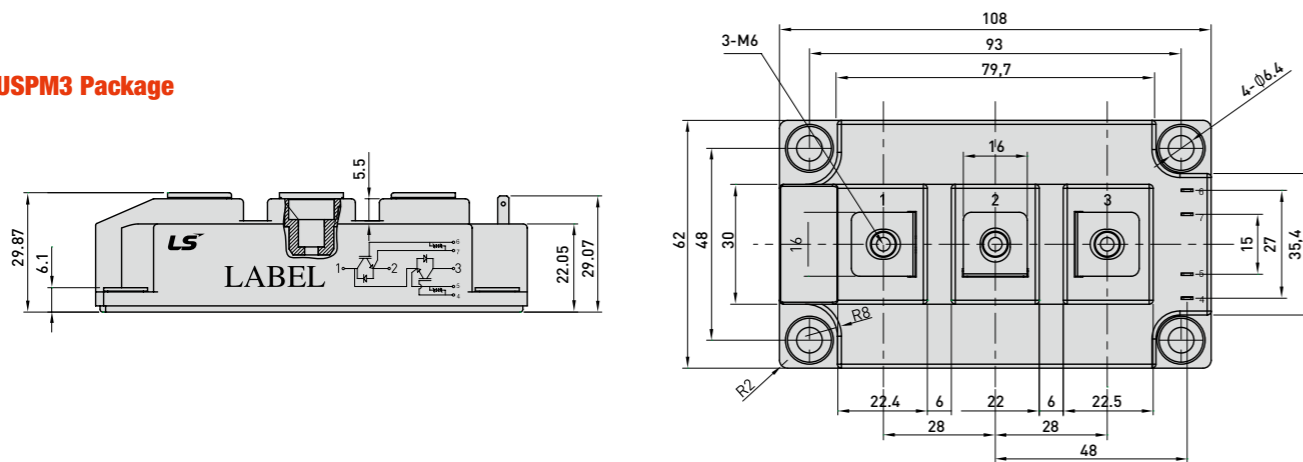
**SUSPM2 Package**



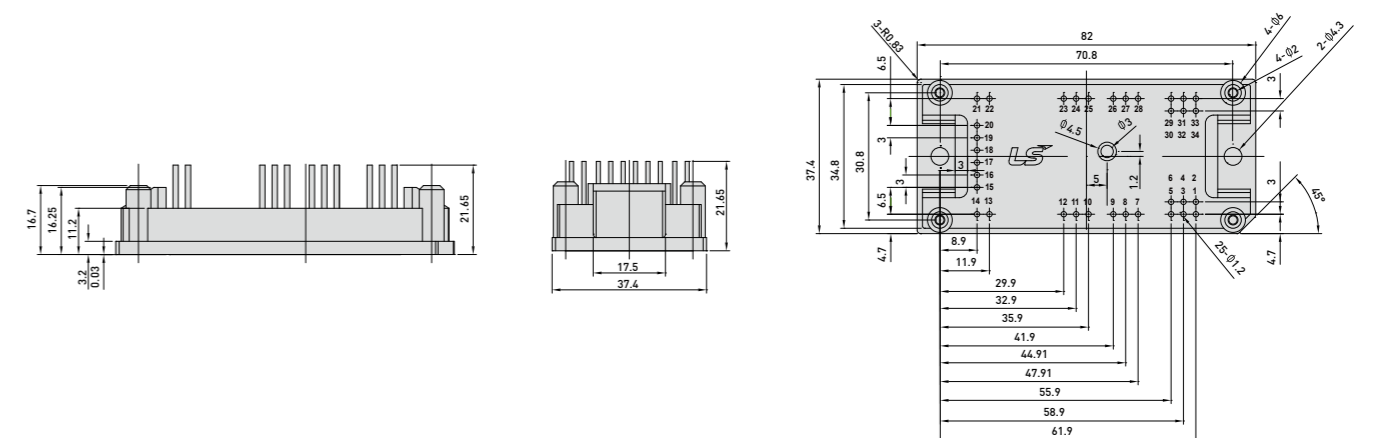
**SISPM1 1Ø CI / 3Ø CIB**



**SUSPM3 Package**



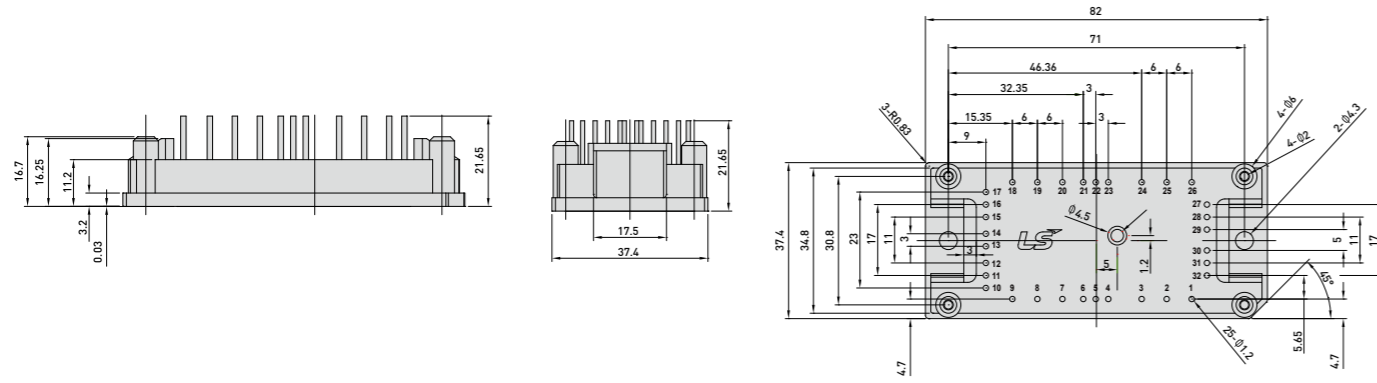
**SISPM1 2PACK MOSFET / 4PACK IGBT**



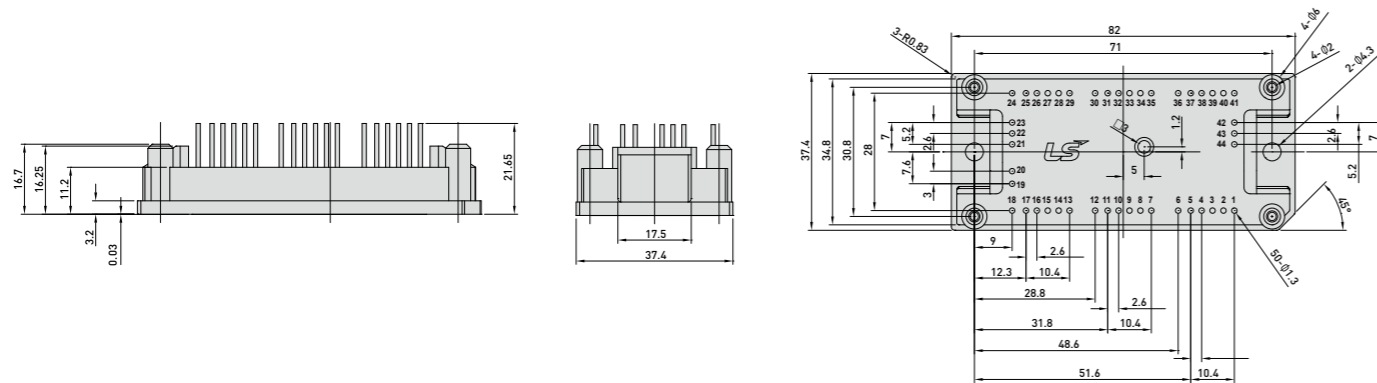
# SISPM™ Package Dimension

# EFPM™ Package Dimension

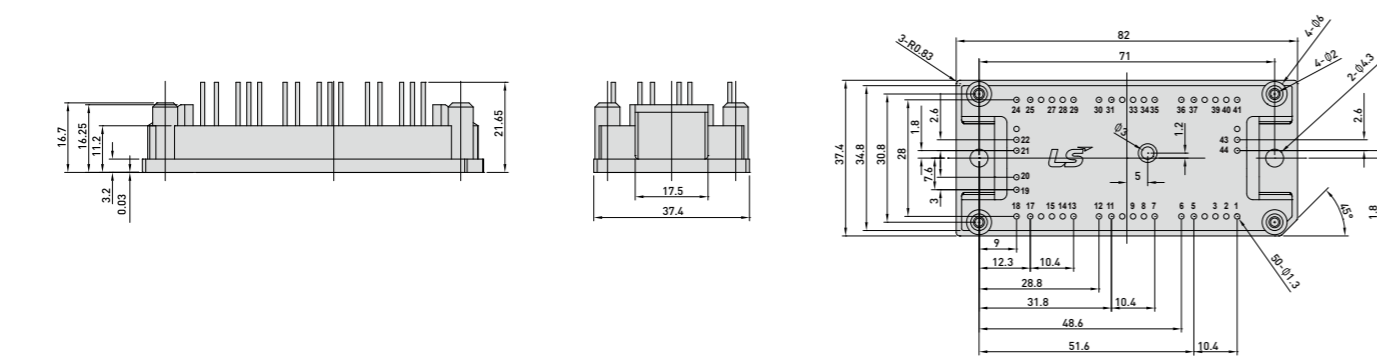
SISPM1 4PACK MOSFET



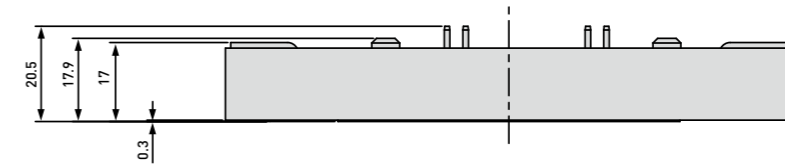
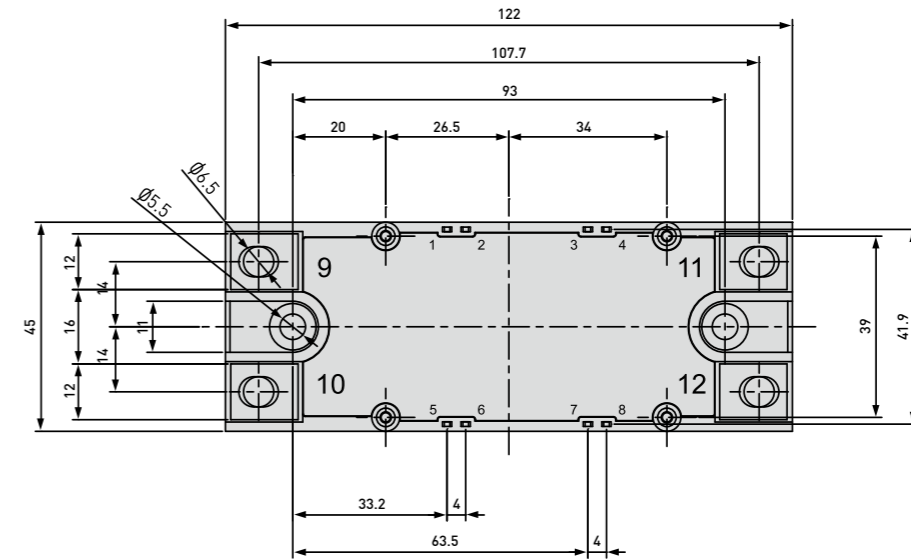
SISPM1 6PACK MOSFET



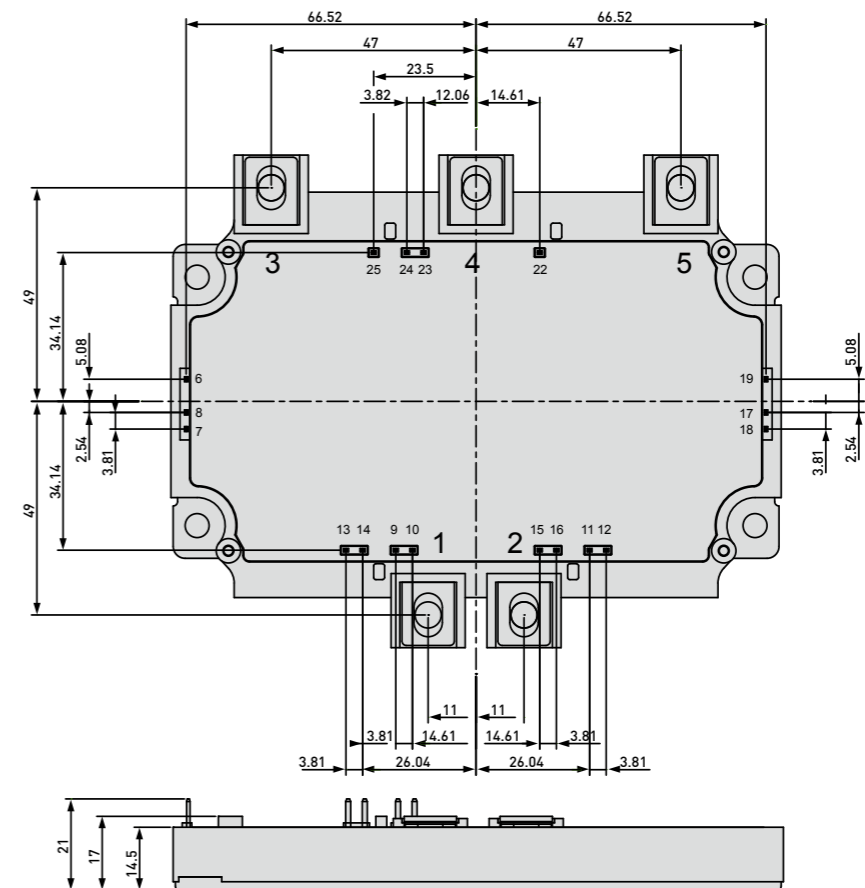
SISPM1 6PACK IGBT



EFPM1 Package

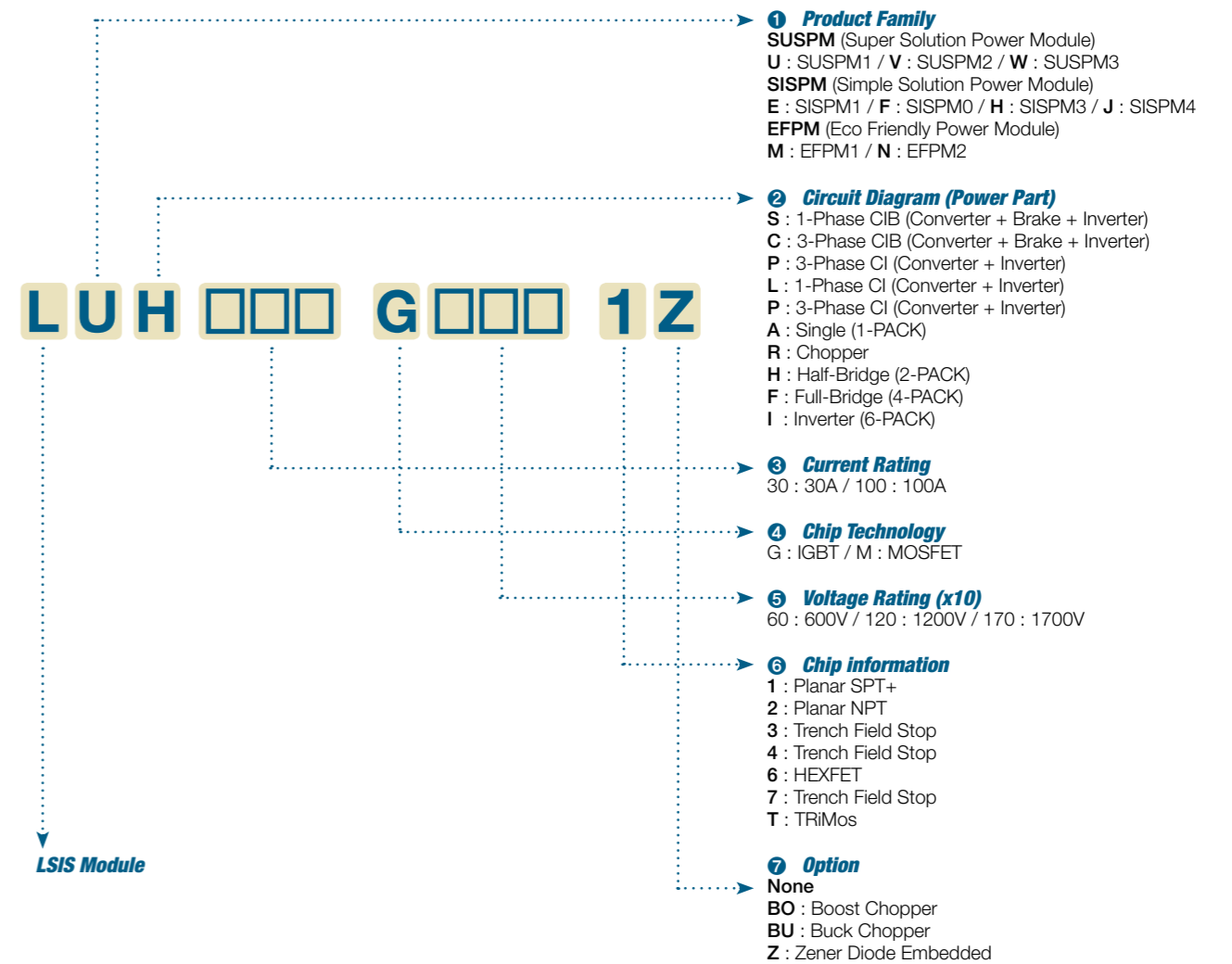


EFPM2 Package





# Ordering information





This catalogue was produced using environmentally-friendly paper recommended by environmental organizations.

## Green Innovators of Innovation



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- For your safety, please read user's manual thoroughly before operating.
- Contact the nearest authorized service facility for examination, repair, or adjustment.
- Please contact qualified service technician when you need maintenance. Do not disassemble or repair by yourself!
- Any maintenance and inspection shall be performed by the personnel having expertise concerned.



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