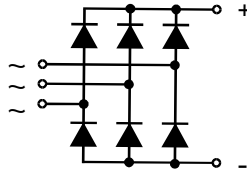


# S3PDB5016

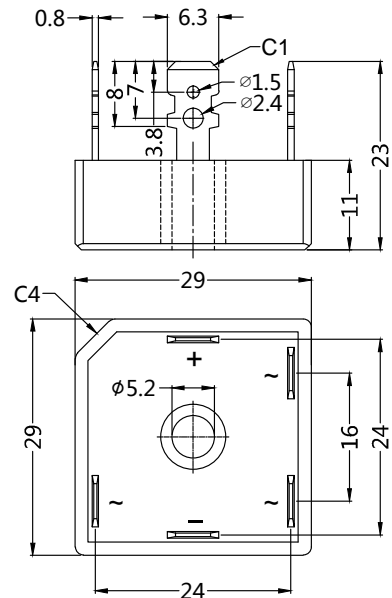
## Three Phase Rectifier Module



**E310749**



### Dimensions(mm)



Type	V <sub>RSM</sub> V	V <sub>RRM</sub> V
S3PDB5004	500	400
S3PDB5006	700	600
S3PDB5008	900	800
S3PDB5010	1100	1000
S3PDB5012	1300	1200
S3PDB5016	1700	1600
S3PDB5018	1900	1800



### Maximum Ratings

Symbol	Test Conditions	Maximum Ratings	Unit
I <sub>dav</sub>	TC=50°C	50	A
I <sub>FSM</sub>	TVJ=25°C VR=0 t=10ms (50Hz), sine t=8.3ms (60Hz), sine	500 550	A
I <sup>2</sup> t	TVJ=25°C VR=0 t=10ms (50Hz), sine t=8.3ms (60Hz), sine	1100 1210	A <sup>2</sup> s
T <sub>VJ</sub>		-40...+150	°C
T <sub>VJM</sub>		150	
T <sub>stg</sub>		-40...+125	
V <sub>ISOL</sub>	50/60Hz, RMS I <sub>ISOL</sub> ≤1mA t=1min t=1s	2500 3000	V~
Md	Mounting torque (M4)	1.5-2 14-18	Nm lb.in.
Weight	typ.	16	g

### Characteristics

IFAV	Max. current with cooling fin 300 cm <sup>2</sup>	TA = 50°C R-load	50	A
VF	Forward voltage	T <sub>j</sub> = 25°C IF = 18 A	< 1.20	V
IR	Leakage current	T <sub>j</sub> = 25°C VR = VRRM	< 10	µA
Rthjc	Thermal resistance junction to case		< 0.9	K/W

**Sirectifier®**

# S3PDB5016

## Three Phase Rectifier Module

### FEATURES

- Rating to 1800V PRV
- High efficiency
- Glass passivated chip junction
- Electrically isolated metal case for maximum heat dissipation
- UL File NO.E310749
- ROHS Compliant

### MECHANICAL DATA

- Case: Molded plastic with Heatsink internally mounted in the bridge encapsulation
- Polarity: As marked on Body
- Mounting: Hole for # 10 screw
- Weight: 0.63 ounces, 18.0 grams

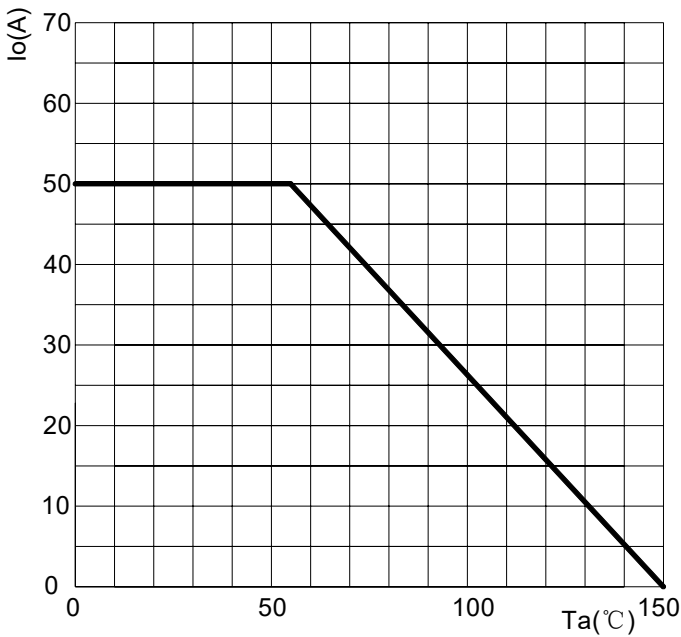


Fig.1: Rated forward current versus ambient temperature

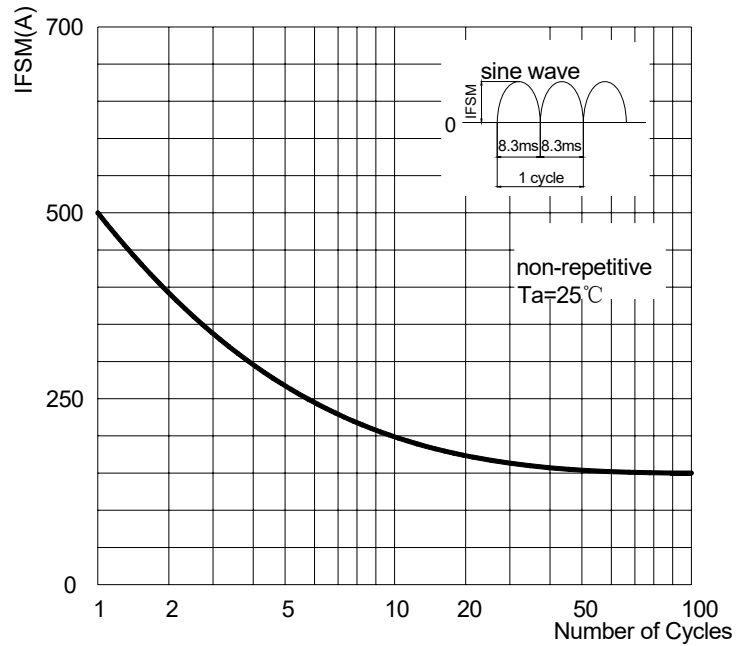


Fig.2: Surge Forward Current Capacity

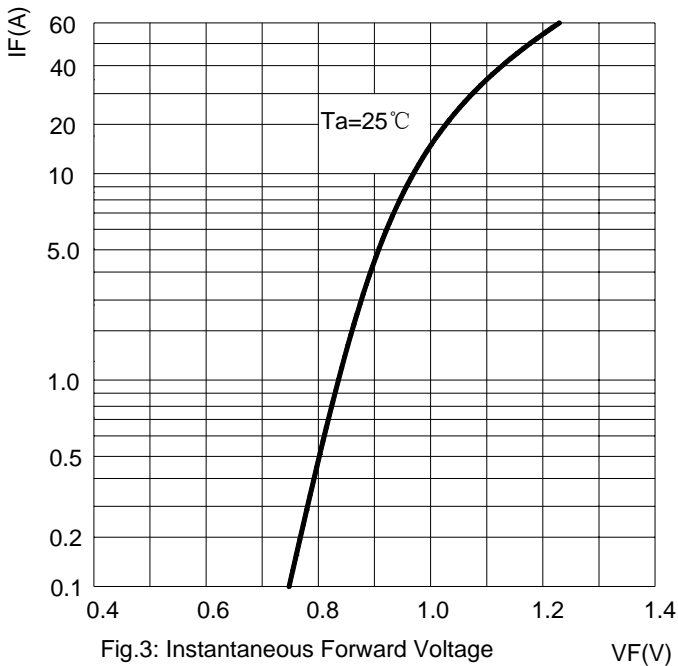


Fig.3: Instantaneous Forward Voltage

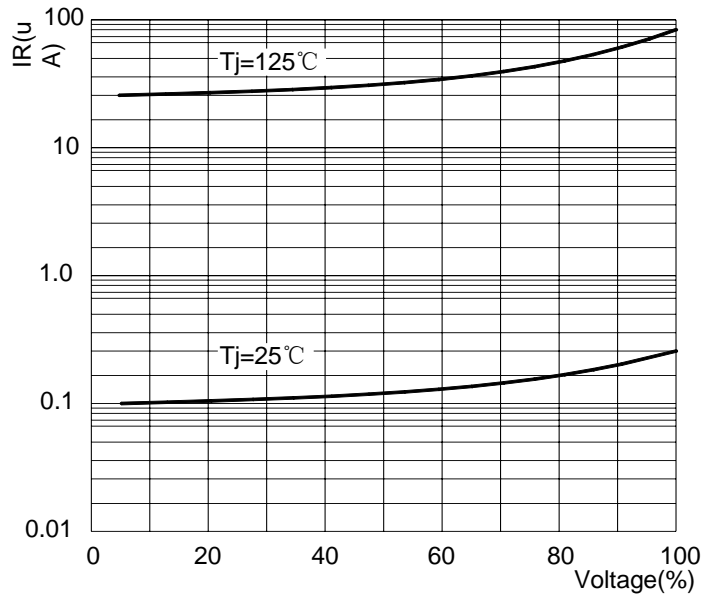


Fig.4: Typical Reverse Characteristics