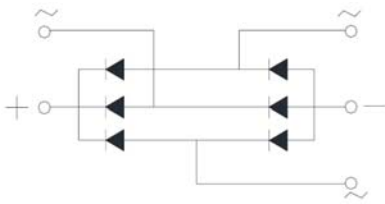




MDS35-4 THRU MDS35-16

Three Phase Bridge Rectifiers



Features

- UL recognition, file #E230084
- Low thermal resistance
- Glass passivated chip junction
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

General purpose use in AC/DC bridge full wave rectification for Server、Frequency converter、Industrial power supply.

Mechanical Data

- **Package:** MDS35
Molding compound meets UL 94 V-0 flammability rating
- **Terminals:** Au plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

■Maximum Ratings (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MDS35-4	MDS35-6	MDS35-8	MDS35-10	MDS35-12	MDS35-14	MDS35-16
Device marking code			MDS35-4	MDS35-6	MDS35-8	MDS35-10	MDS35-12	MDS35-14	MDS35-16
Maximum Repetitive Peak Reverse Voltage	VRRM	V	400	600	800	1000	1200	1400	1600
Maximum RMS Voltage	VRMS	V	280	420	560	700	840	980	1120
Maximum DC blocking Voltage	VDC	V	400	600	800	1000	1200	1400	1600
Average rectified output current @60Hz sine wave, R-load	IO	A	35.0						
With heatsink T _c =105°C									
Forward Surge Current (Non-repetitive) @8.3ms Half-sine wave, 1 cycle, T _j =25°C	IFSM	A	400						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T _j =25°C			800						
Current squared time @1ms≤t≤8.3ms T _j =25°C, Rating of per diode	I ² t	A ² s	664						
Storage temperature	T _{stg}	°C	-55 ~ +150						
Junction temperature	T _j	°C	-55 ~ +150						
Dielectric strength @ Terminals to case, AC 1 minute	V _{dis}	KV	2.5						
Mounting torque @Recommend torque: 5kg·cm	Tor	kg·cm	8						



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■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MDS35-4	MDS35-6	MDS35-8	MDS35-10	MDS35-12	MDS35-14	MDS35-16	
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =17.5A								1.1
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	μA	T _j =25°C								5
			T _j =125°C								500
Typical junction capacitance	C _j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C								185

■ Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	MDS35-4	MDS35-6	MDS35-8	MDS35-10	MDS35-12	MDS35-14	MDS35-16	
Typical Thermal Resistance	Between junction and case, With heatsink	R _{θJ-C}	°C/W								0.8

Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MDS35-4 ~ MDS35-16	A1	Approximate 17.5	50	50	500	Paper Box

■ Characteristics (Typical)

FIG1:I_o-T_c Curve

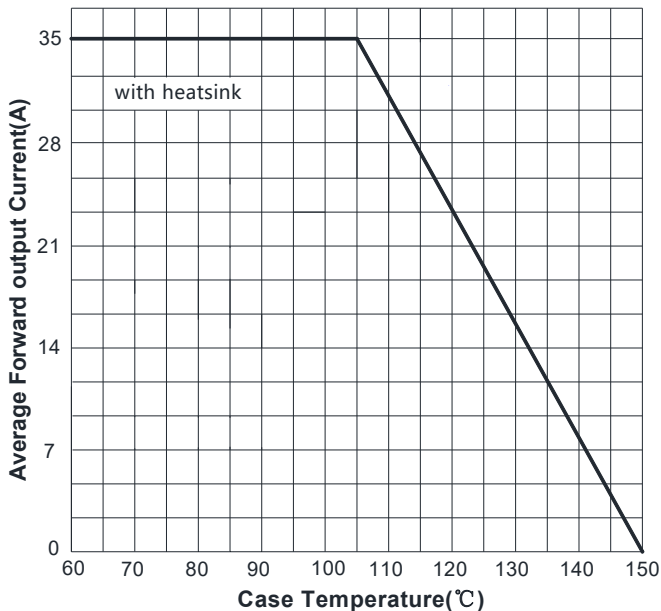
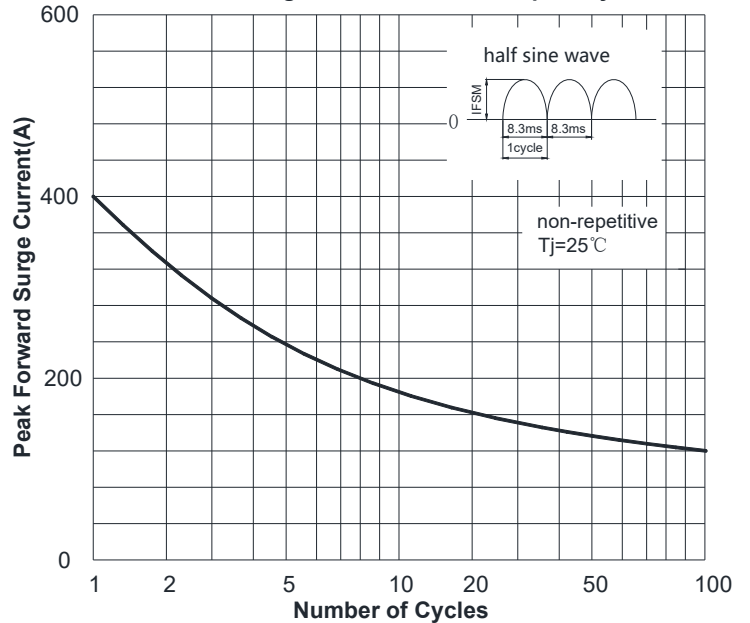


FIG2: Surge Forward Current Capability





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FIG3: Typical Forward Voltage

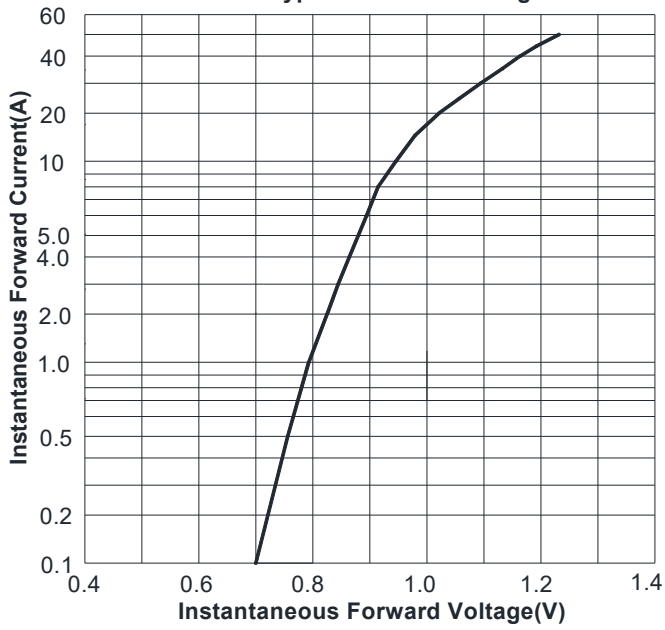
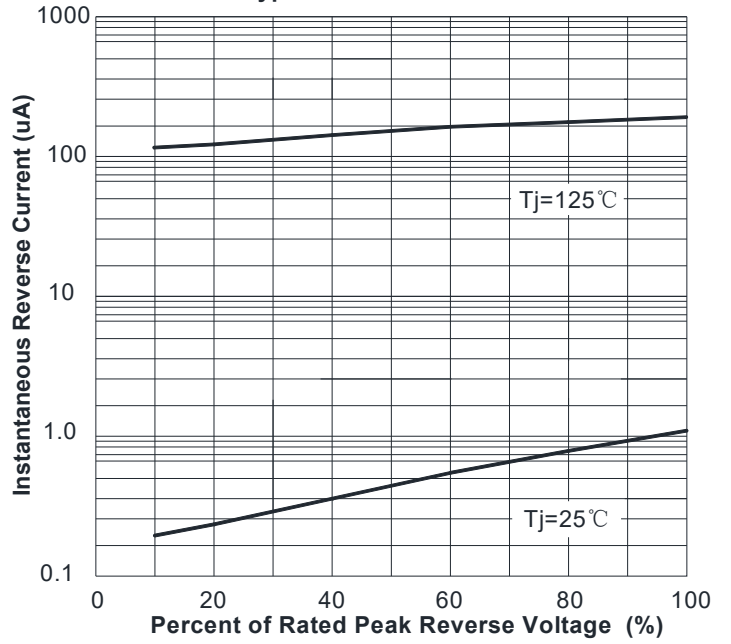
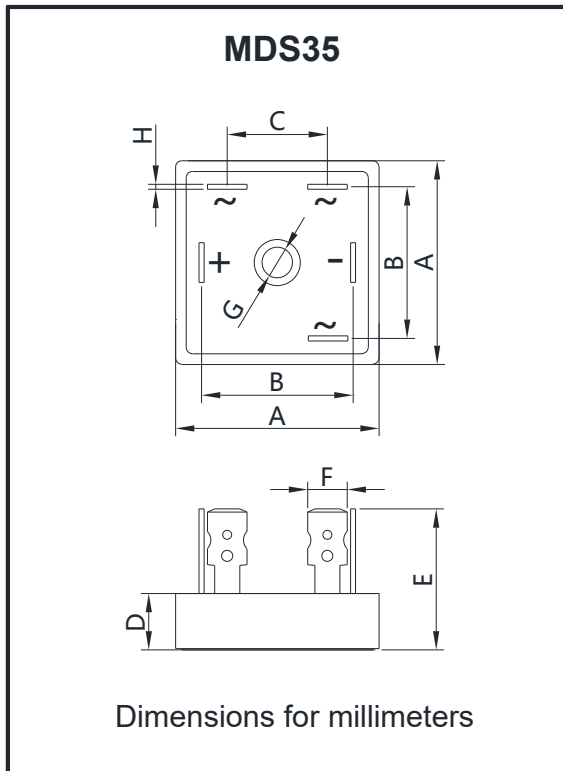


FIG4: Typical Reverse Characteristics



■ Outline Dimensions



MDS35		
Dim	Min	Max
A	32.0	33.0
B	23.7	24.7
C	15.5	16.5
D	8.6	9.4
E	22	24
F	6.2	6.5
G	4.8	5.4
H	0.75	0.85



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