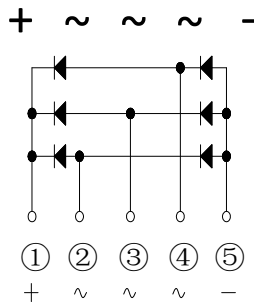


Three Phase Bridge Rectifiers



Features

- UL recognition, file #E230084
- Glass passivated chip junction
- Thin single in-line package
- 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 switching power supply, home appliances, office equipment, industrial automation applications.

Mechanical Data

- **Package:** TSB-5
Molding compound meets UL 94 V-0 flammability rating, -
- **Terminals:** Tin 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	DF35NA80	DF35NA100	DF35NA120	DF35NA160
Device marking code			DF35NA80	DF35NA100	DF35NA120	DF35NA160
Maximum Repetitive Peak Reverse Voltage	VRRM	V	800	1000	1200	1600
Maximum RMS Voltage	VRMS	V	560	700	840	1120
Maximum DC blocking Voltage	VDC	V	800	1000	1200	1600
Average Rectified Output Current @8.3ms, sine wave, R-load, With heatsink, T _C =100°C	I _O	A	35			
Forward Surge Current (Non-repetitive) @8.3ms, Half-sine wave, 1 cycle, T _J =25°C	IFSM	A	450			
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T _J =25°C			900			
Current Squared Time @1ms≤t<8.3ms T _J =25°C, Rating of per diode	I ² t	A ² S	841			
Dielectric strength @terminals to case, AC 1 minute	V _{dis}	KV	2.5			
Mounting torque @recommend torque: 5kg·cm	T _{or}	kg·cm	8			
Storage Temperature	T _{stg}	°C	-55 ~ +150			
Junction Temperature	T _J	°C	-55 ~ +150			

DF35NA80 THRU DF35NA160

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	DF35NA80	DF35NA100	DF35NA120	DF35NA160
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	230		240	

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

PARAMETER	SYMBOL	UNIT	DF35NA80	DF35NA100	DF35NA120	DF35NA160
Thermal Resistance Between junction and case, With heatsink	R _{θJ-C}	°C/W	1.0			

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

■Ordering Information (Example)

PREFERED P/N	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
DF35NA80 ~ DF35NA160	Approximate 15.8	96	96	576	Paper Box

■ Characteristics(Typical)

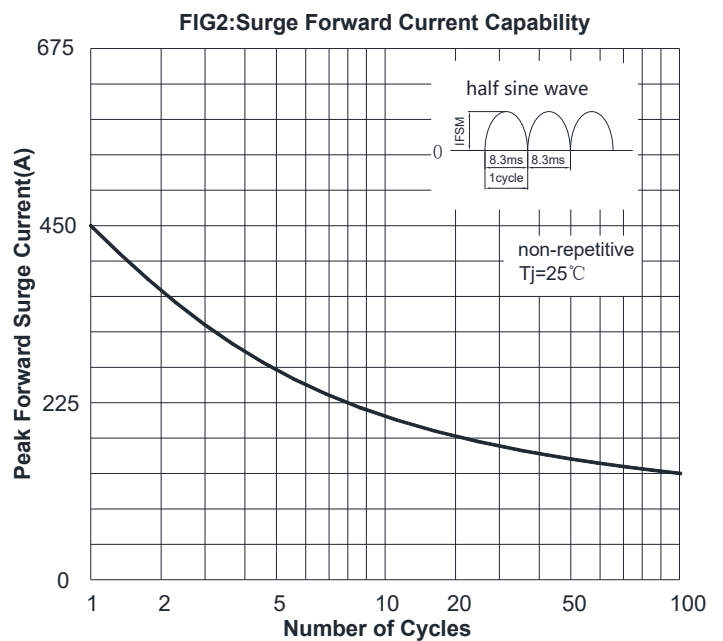
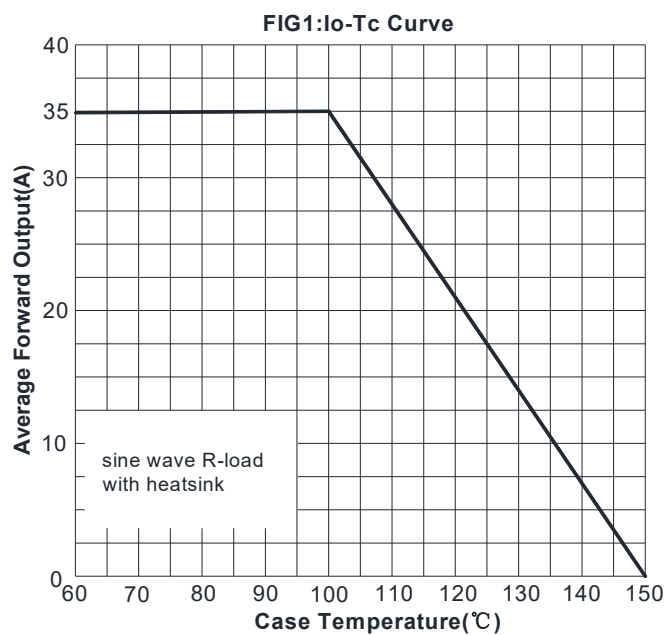


FIG3: Typical Forward Voltage

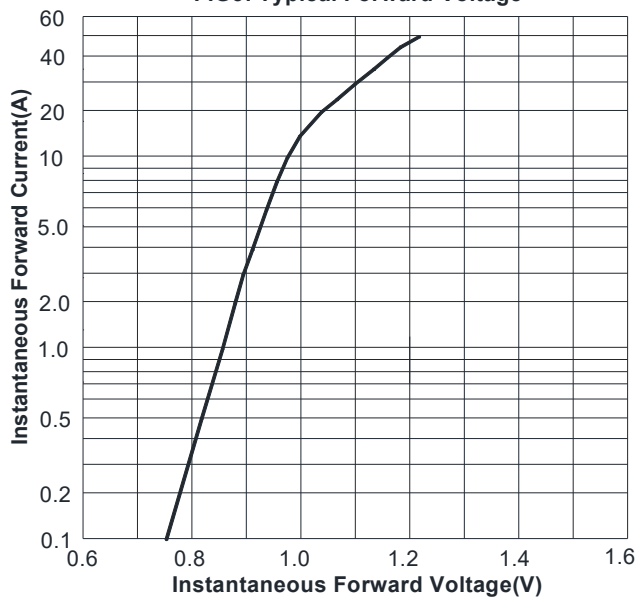
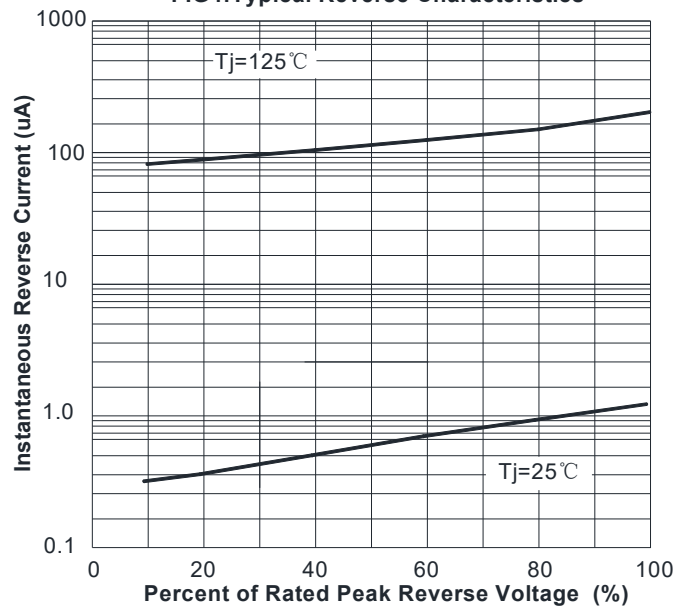
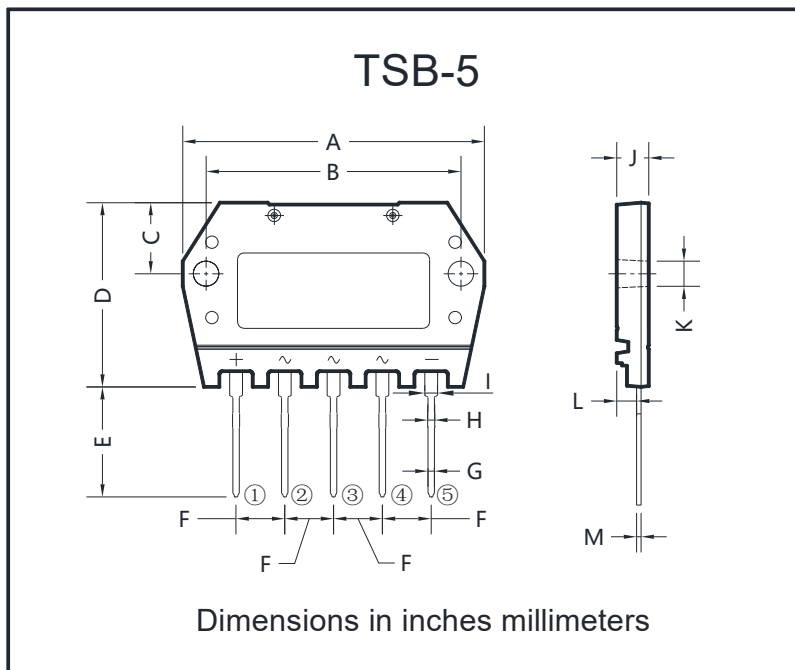


FIG4: Typical Reverse Characteristics



■ **Outline Dimensions**



TSB-5		
Dim	Min	Max
A	46.6	47.6
B	39.5	40.1
C	11.0	11.6
D	28.8	29.8
E	17.2	17.8
F	7.52	7.72
G	0.90	1.10
H	1.00	1.20
I	1.90	2.10
J	4.70	5.30
K	4.00	4.50
L	3.00	3.20
M	0.60	0.80

Disclaimer

The information presented in this document is for reference only. Shanghai Sunco Electronics Co., Ltd reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Russiansunco or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.russiansunco.com](http://www.russiansunco.com) , or consult your nearest Russiansunco's sales office for further assistance.