

## Three Phase Bridge Rectifiers

### Features

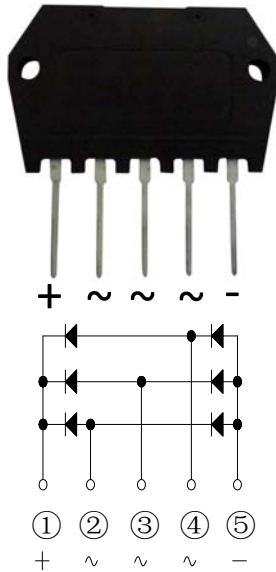
- UL recognition, file #E230084
- I Thin single in-line package
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### 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, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body



### ■ Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	DF25NA80	DF25NA100	DF25NA160
Device marking code			DF25NA80	DF25NA100	DF25NA160
Repetitive Peak Reverse Voltage	VRRM	V	800	1000	1600
Average Rectified Output Current @60Hz sine wave, R-load, With heatsink T <sub>c</sub> =87°C	I <sub>O</sub>	A	25		
Surge(Non-repetitive)Forward Current @60HZ half-sine wave, 1 cycle, T <sub>j</sub> =25°C	I <sub>FSM</sub>	A	400		
Current Squared Time @1ms≤t<8.3ms T <sub>j</sub> =25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> S	666		
Storage Temperature	T <sub>stg</sub>	°C	-55 ~+150		
Junction Temperature	T <sub>j</sub>	°C	-55 ~+150		

### ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

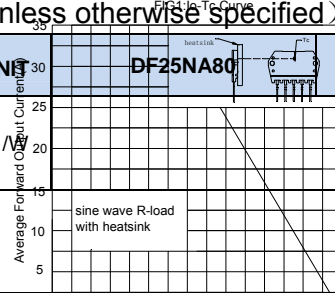
PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	DF25NA80	DF25NA100	DF25NA160
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =12.5A	1.1		
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM</sub>	μA	V <sub>RM</sub> =VRRM	10		



# DF25NA80 THRU DF25NA160

## Thermal Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	DF25NA80	DF25NA100	DF25NA160
Thermal Resistance	RθJ-C	°C/W	1.2		



## Ordering Information (Example)

PREFERRED P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
DF25NA80~DF25NA160	Approximate 15.8	96	96	576	Paper Box

## Characteristics(Typical)

FIG1:I<sub>o</sub>-T<sub>c</sub> Curve

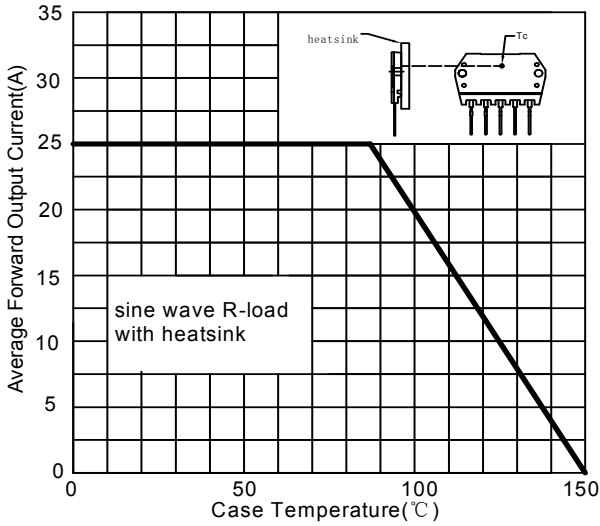


FIG2: Surge Forward Current Capability

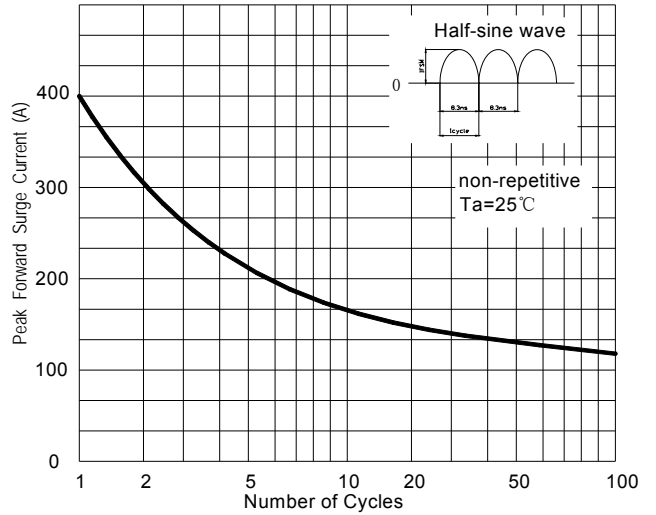


FIG3: Instantaneous Forward Voltage

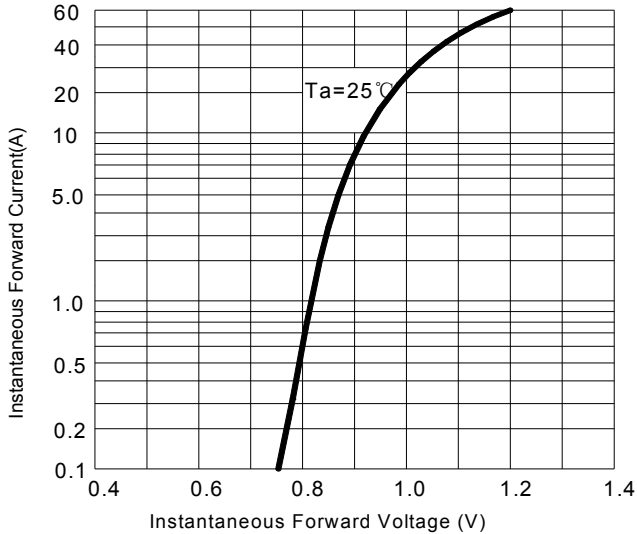
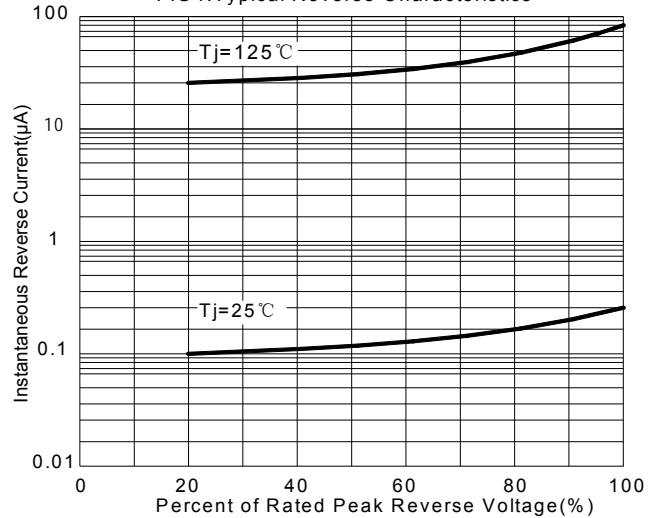


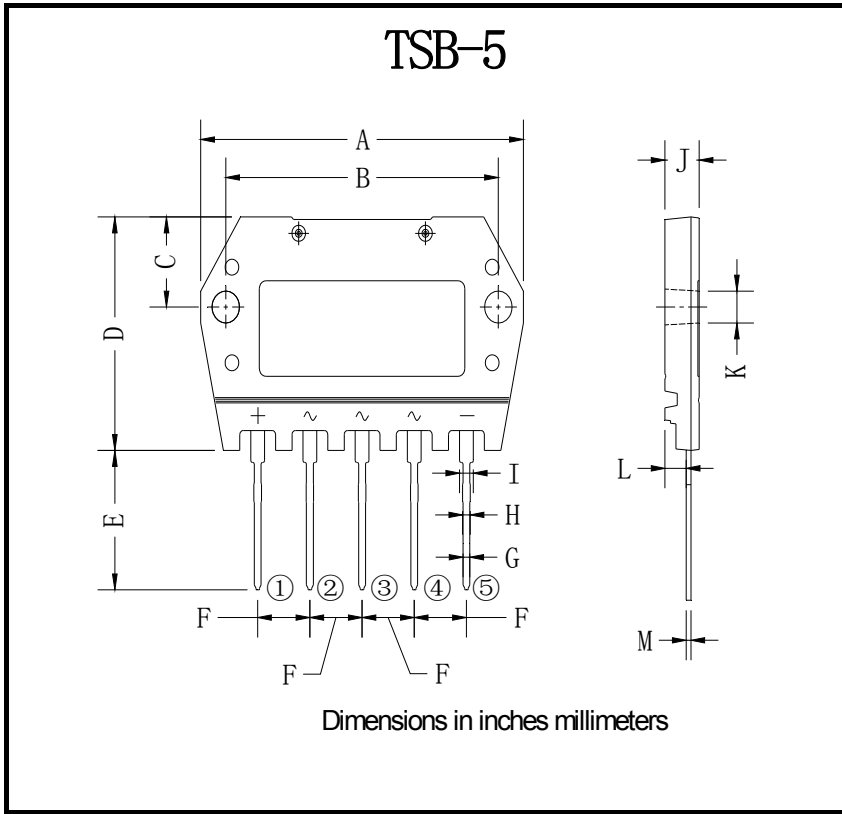
FIG4: Typical Reverse Characteristics





# DF25NA80 THRU DF25NA160

## ■ 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



## DF25NA80 THRU DF25NA160

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