

### ■ 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	DF35NA80	DF35NA100	DF35NA160
Device marking code			DF35NA80	DF35NA100	DF35NA160
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	35		
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	DF35NA80	DF35NA100	DF35NA160
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	IFM=17.5A	1.2		
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM</sub>	µA	VRM=VRRM	10		

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

PARAMETER	SYMBOL	UNIT	DF35NA80	DF35NA100	DF35NA160
Thermal Resistance Between junction and case, With heatsink	R <sub>θJ-C</sub>	°C/W	1		

■ **PACKAGING INFORMATION**

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

■ **CHARACTERISTICS (TYPICAL)**

FIG1:Io-Tc Curve

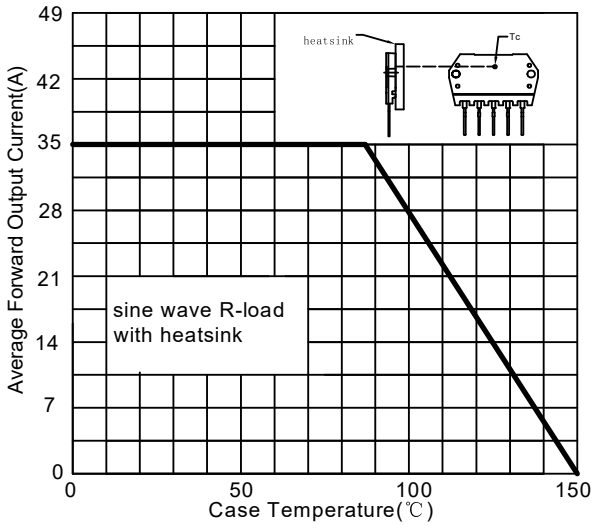


FIG2:Surge Forward Current Capability

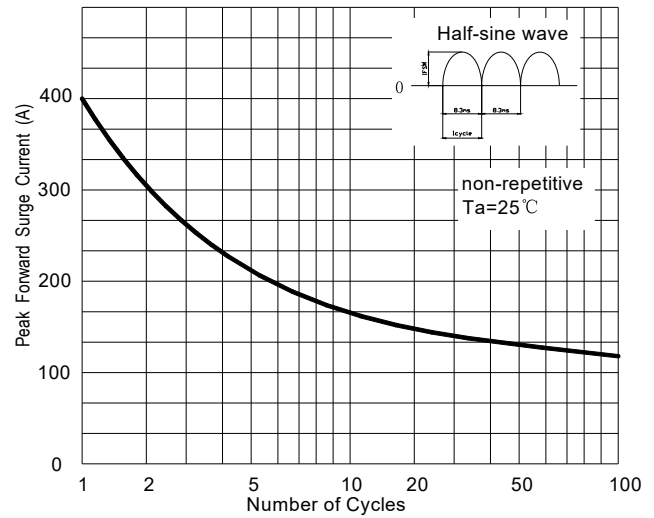


FIG3:Instantaneous Forward Voltage

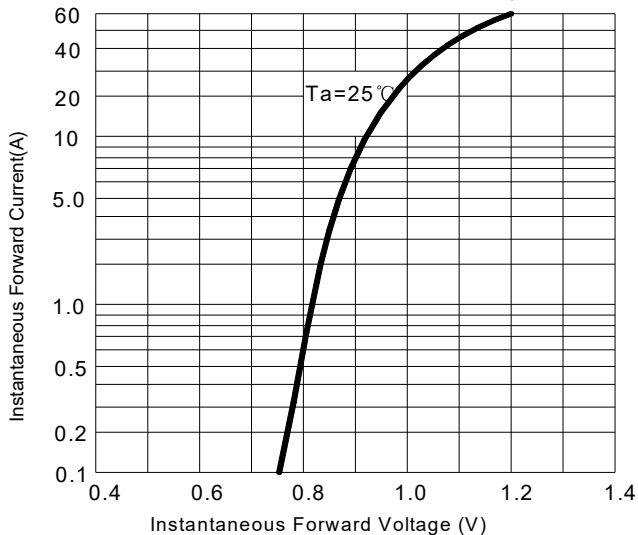
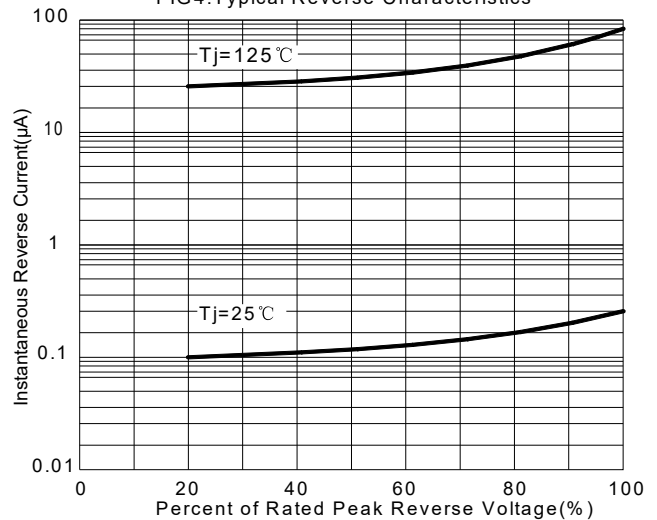
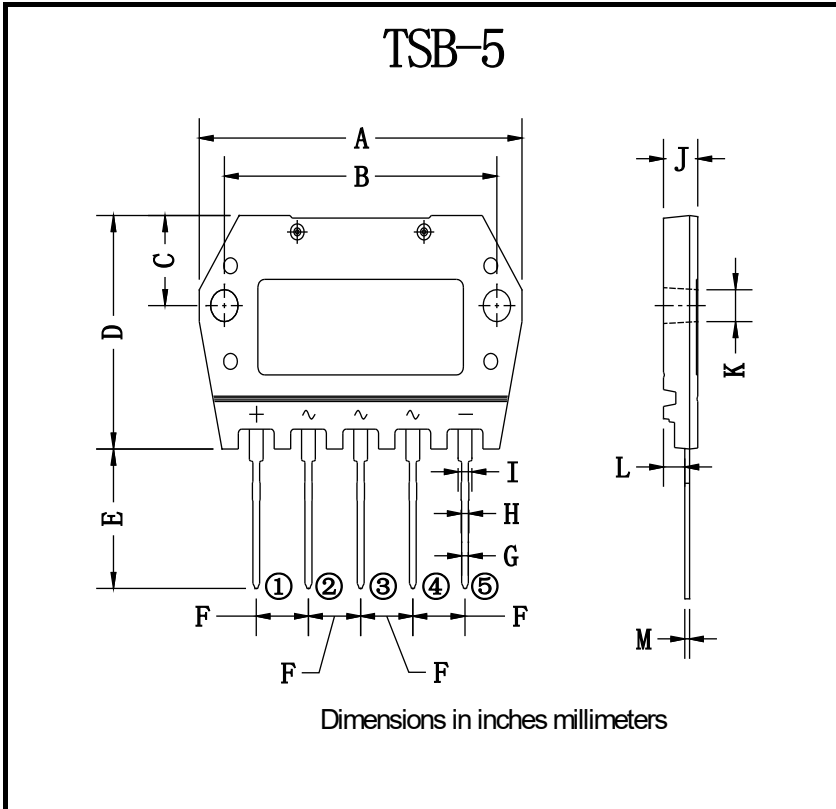


FIG4:Typical Reverse Characteristics



■ **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