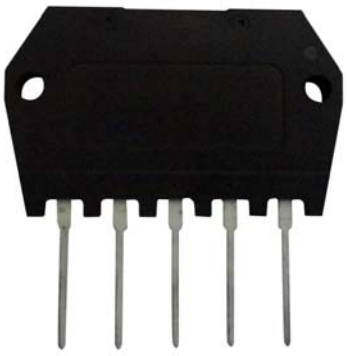
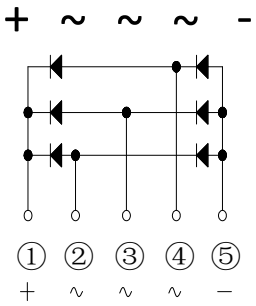
Three Phase Bridge Rectifiers





Features

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

■Maximum Ratings (T_a=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	DF50NA80	DF50NA100	DF50NA120	DF50NA160
Device marking code			DF50NA80	DF50NA100	DF50NA120	DF50NA160
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	800	1000	1200	1600
Maximum RMS Voltage	V_{RMS}	V	560	700	840	1120
Maximum DC blocking Voltage	V_{DC}	V	800	1000	1200	1600
Average Rectified Output Current @8.3ms,sine wave, R-load, With heatsink,T_C =85℃	I_O	A	50			
Forward Surge Current (Non-repetitive) @8.3ms, Half-sine wave,1 cycle, Tj=25℃	I_{FSM}	A	500			
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃			1000			
Current Squared Time @1ms≤t<8.3ms Tj=25℃， Rating of per diode	I^2t	A^2S	1037.5			
Dielectric strength @terminals to case, AC 1 minute	Vdis	KV	2.5			
Mounting torque @recommend torque：5kg·cm	Tor	kg·cm	8			
Storage Temperature	Tstg	℃	-55 ~ +150			
Junction Temperature	Tj	℃	-55 ~ +150			

■Electrical Characteristics（T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	DF50NA80	DF50NA100	DF50NA120	DF50NA160
Maximum instantaneous forward voltage drop per diode	V_F	V	I_{FM}=25.0A	1.1			
Maximum DC reverse current at rated DC blocking voltage per diode	I_R	μA	T_j=25℃	5			
			T_j=125℃	500			
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	230		240	

■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	DF50NA80	DF50NA100	DF50NA120	DF50NA160
Thermal Resistance	Between junction and case, With heatsink	$R_{\theta J-C}$	℃/W	0.7			

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
DF50NA80 ~ DF50NA160	Approximate 15.8	96	96	576	Paper Box

■ Characteristics(Typical)

FIG1:Io-Tc Curve

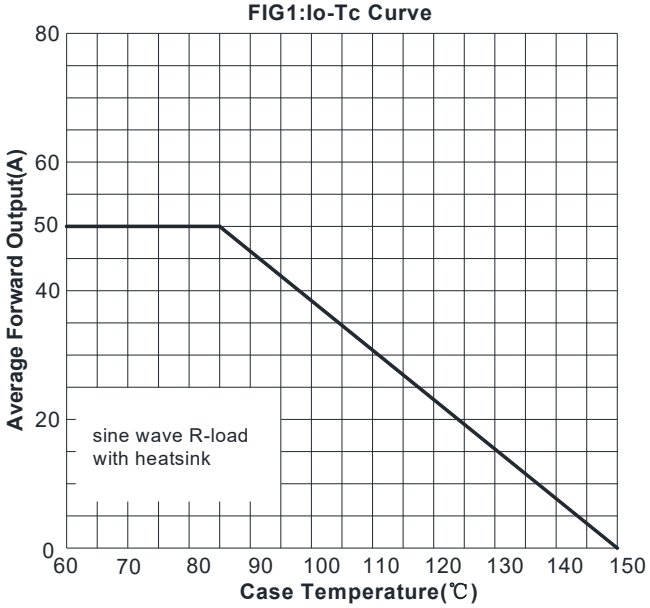


FIG2:Surge Forward Current Capability

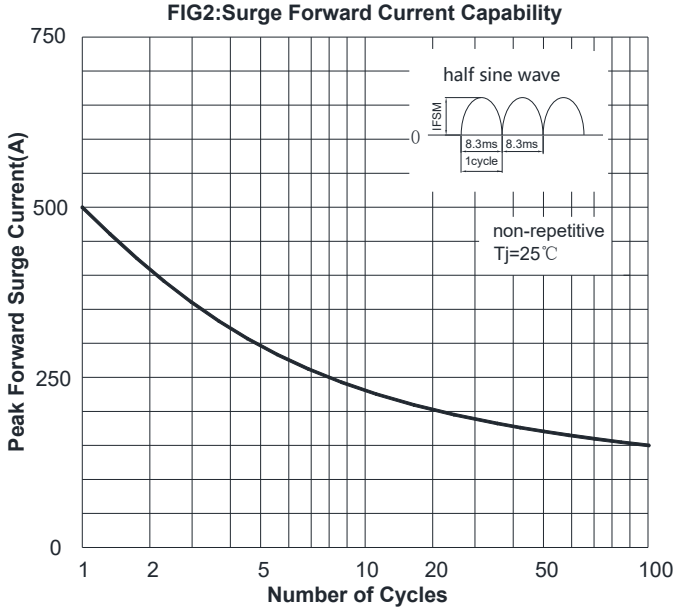


FIG3: Typical Forward Voltage

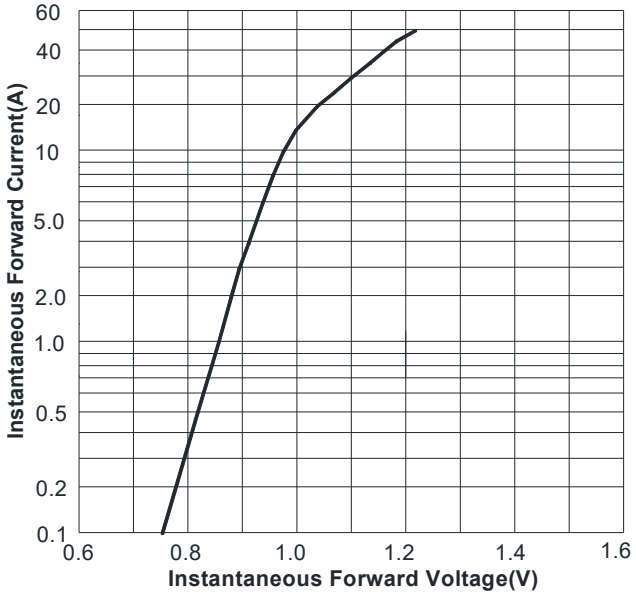
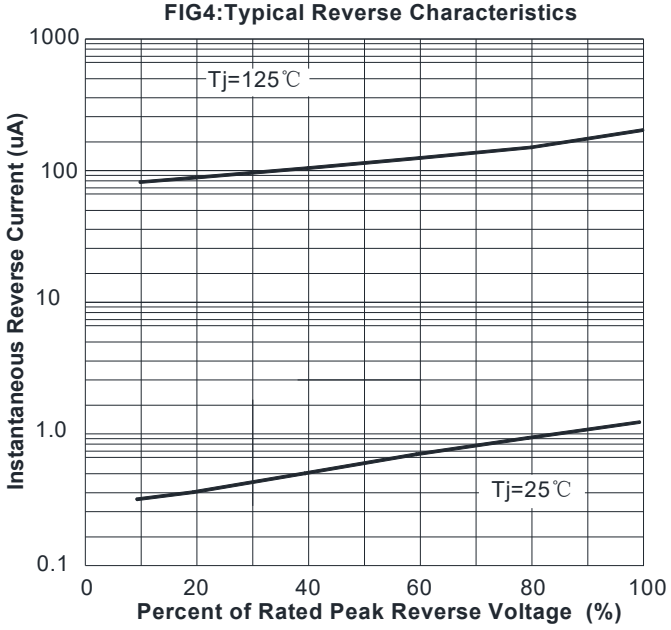
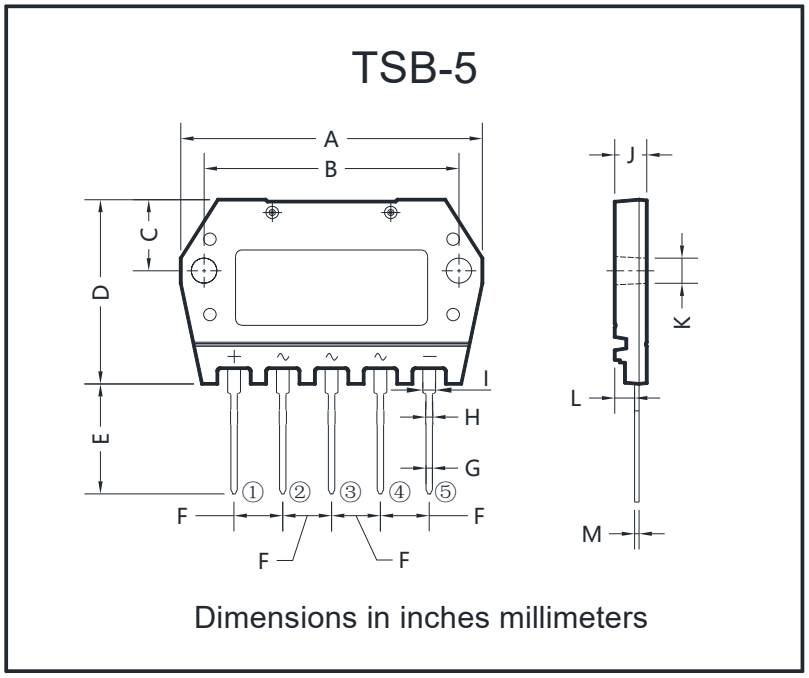


FIG4:Typical Reverse Characteristics



■ 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

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