

/ Descriptions

3.0A DBF
3.0A Surface Mount Glass Passivated Bridge Rectifier, DBF thin package.

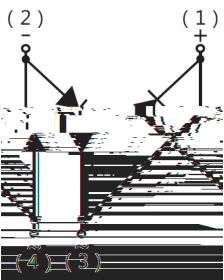
/ Features

50V~1000V 3.0A
Glass passivated chip,High Surge Current Capability,Reverse Voltage :50 to 1000V,Forward Current: 3.0A, Designed for Surface Mount Application,HF product.

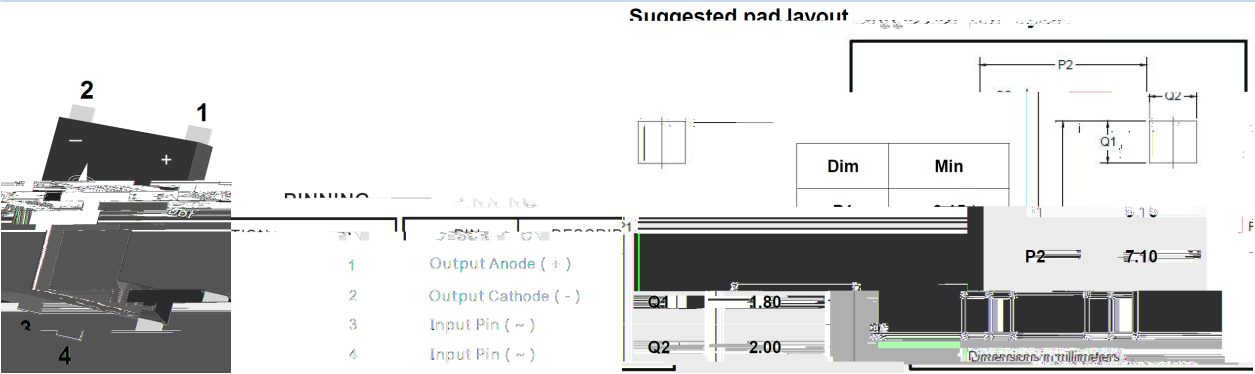
/ Applications

General purpose.

/ Equivalent Circuit



/ Pinning



/ Marking

See Marking Instructions.

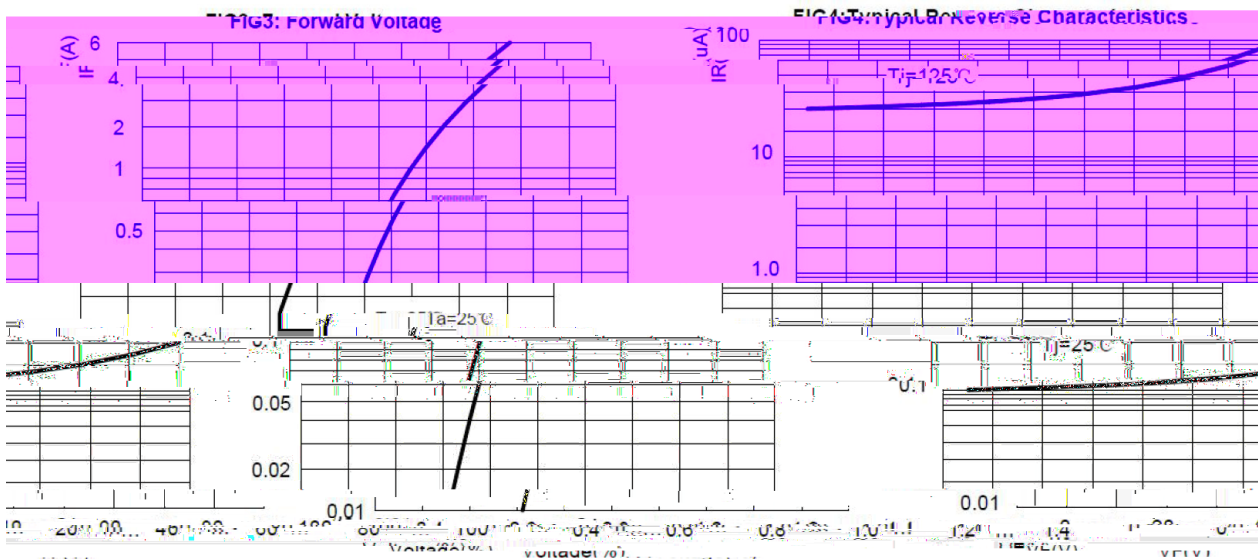
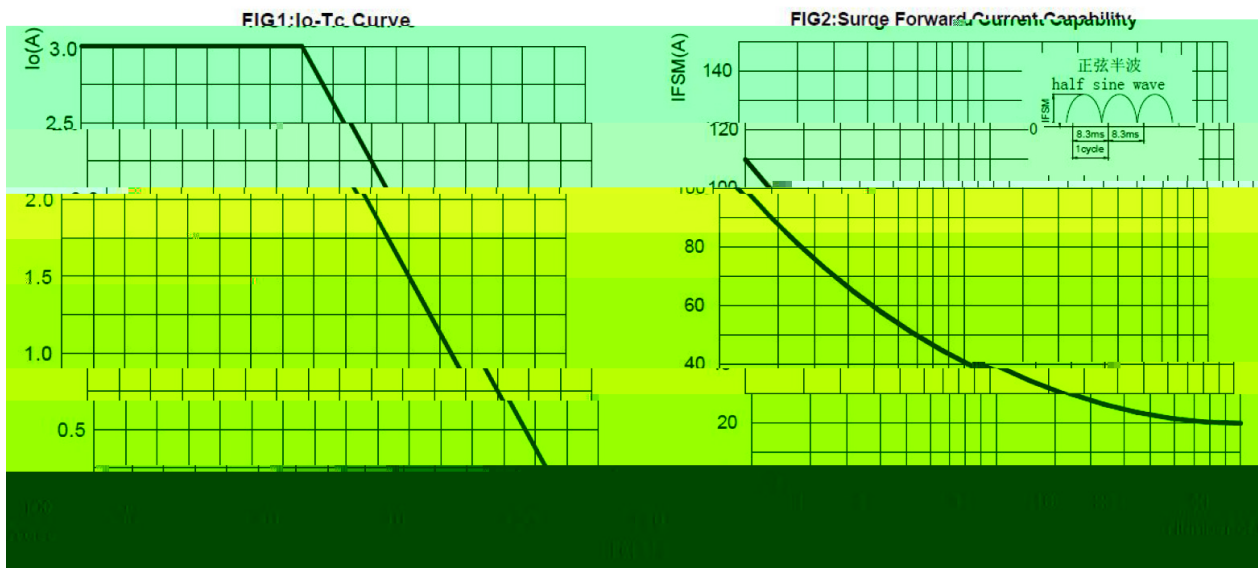
/ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating							Unit
		DBF3005	DBF301	DBF302	DBF304	DBF306	DBF308	DBF310	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{R(RMS)}	35	70	140	280	420	560	720	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current@60HZ sine wave, R-load T _C =70	I _{O(AV)}	3							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half @60HZ,T _J =25	I _{FSM}	110							A
Current squared time@1ms ≤ t ≤ 8.3ms,T _J =25 , Rating of per diode	I ² t	50.2							A ² s
Typical Thermal Resistance perleg	R _{θJA}	55							/ W
	R _{θJL}	15							
	R _{θJC}	10							
Operating and Storage Temperature Range	T _J , T _{stg}	-55~+150							

/ Electrical Characteristics($T_a=25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	Rating	Unit
Maximum instantaneous forward voltage	V_{FM}	$I_F=1.5\text{A}$	1.0	V
		$I_F=3.0\text{A}$	1.1	
Peak Reverse Current At Rated DC Blocking Voltage	I_{RM}	$T_J=25^\circ\text{C}$	5	μA
		$T_J=125^\circ\text{C}$	300	

/ Electrical Characteristic Curve



/ Marking Instructions



DBF3005

Note:

DBF3005 Product Type

Marking

Type number	Marking code
DBF3005	DBF3005
DBF301	DBF301
DBF302	DBF302
DBF304	DBF304
DBF306	DBF306
DBF308	DBF308
DBF310	DBF310

() / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- 1

150 180

60 90sec;

1.Preheating:150~180 , Time:60~90sec.
- 2

245±5

5±0.5sec;

2.Peak Temp.:245±5 , Duration:5±0.5sec.
- 3

2 10 /sec.

3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
DBF	3,000	2	6,000	6	36,000	13"×16	337×337×49	380×335×366

/ Notices