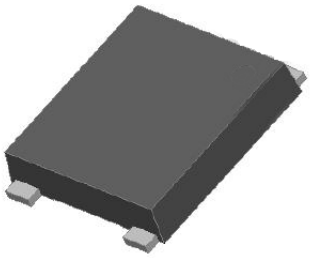
TRR®

DFF3005 thru DFF310

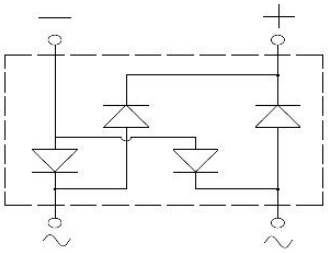
Single Phase 3.0A Surface Mount Glass Passivated Bridge Rectifier

Features

- Glass passivated chip junction
- Ideal for automated placement
- High surge current capability
- Low forward voltage drop
- Design for surface mount application
- Low profile space
- Low leakage current
- High temperature soldering:
  260℃/10 seconds at terminals
- Component in accordance to
  RoHS 2011/65/EU and WEEE 2002/96/EC



Pb
RoHS
COMPLIANT



Mechanical Date

- **Case:**DFF
  Epoxy meets UL 94 V-0 flammability rating
- **Terminals:**Solder plated, solderable per
  J-STD-002 and JESD22-B102
- **Polarity:** Polarity symbols marked on body

Maximum Ratings & Thermal Characteristics TA = 25 °C unless otherwise specified

Parameter		Symbol	DFF 3005	DFF 301	DFF 302	DFF 304	DFF 306	DFF 308	DFF 310	Unit
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	700	
Maximum DC blocking voltage		V_{DC}	50	100	200	400	600	800	1000	
Maximum average forward rectified current @60HZ sine wave,R-load T_L = 50 ℃		$I_{O(AV)}$	3							A
Non-Repetitive peak forward surge current 8.3ms single half @60HZ,T_j=25℃		I_{FSM}	110							A
Operating junction and storage temperature range		T_J, T_{STG}	–55 to +150							℃
Typical thermal resistance per leg	Between junction and ambient	$R_{\theta JA}$	55							℃/W
	Between junction and lead	$R_{\theta JL}$	15							

Electrical Characteristics TA = 25 °C unless otherwise specified

Parameter		Symbol	DFF 3005	DFF 301	DFF 302	DFF 304	DFF 306	DFF 308	DFF 310	Unit
Maximum instantaneous forward voltage	IF=1.0A	V_{FM}	1.0							V
	IF=3.0A		1.1							
Peak reverse current at rated DC blocking voltage	T_A=25℃	I_{RM}	5							μA
	T_A=125℃		300							

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Characteristic Curves (T_A=25 ℃ unless otherwise noted)

FIG1:Io-Tc Curve

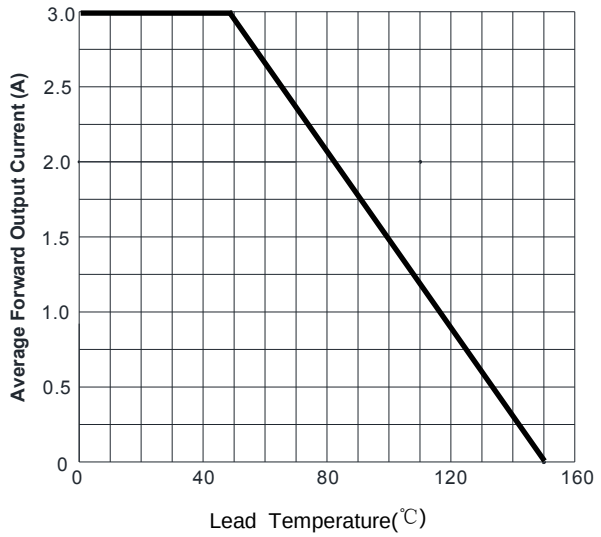


FIG2:Surge Forward Current Capability

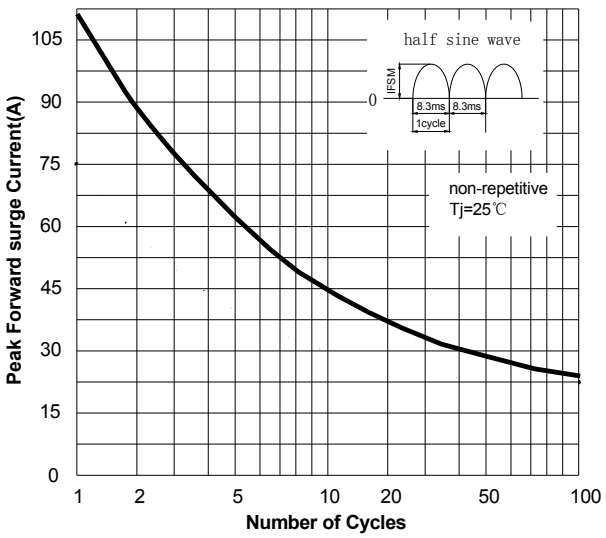


FIG3: Forward Voltage

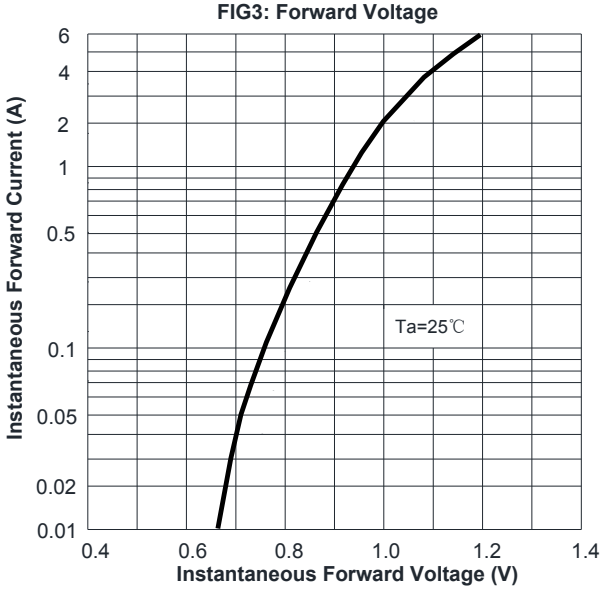
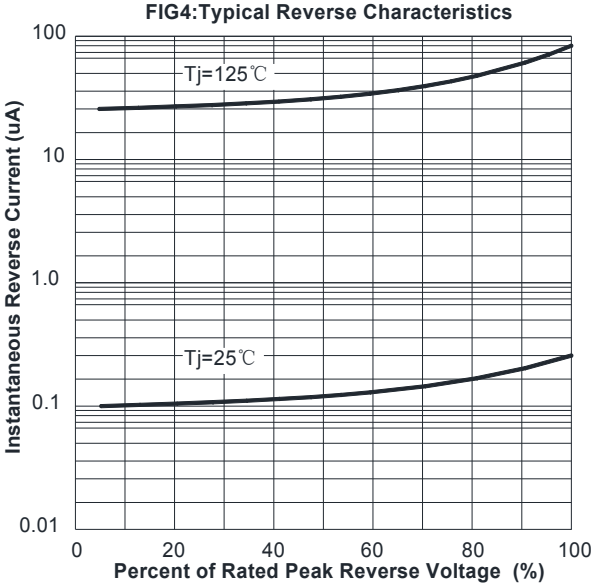


FIG4:Typical Reverse Characteristics



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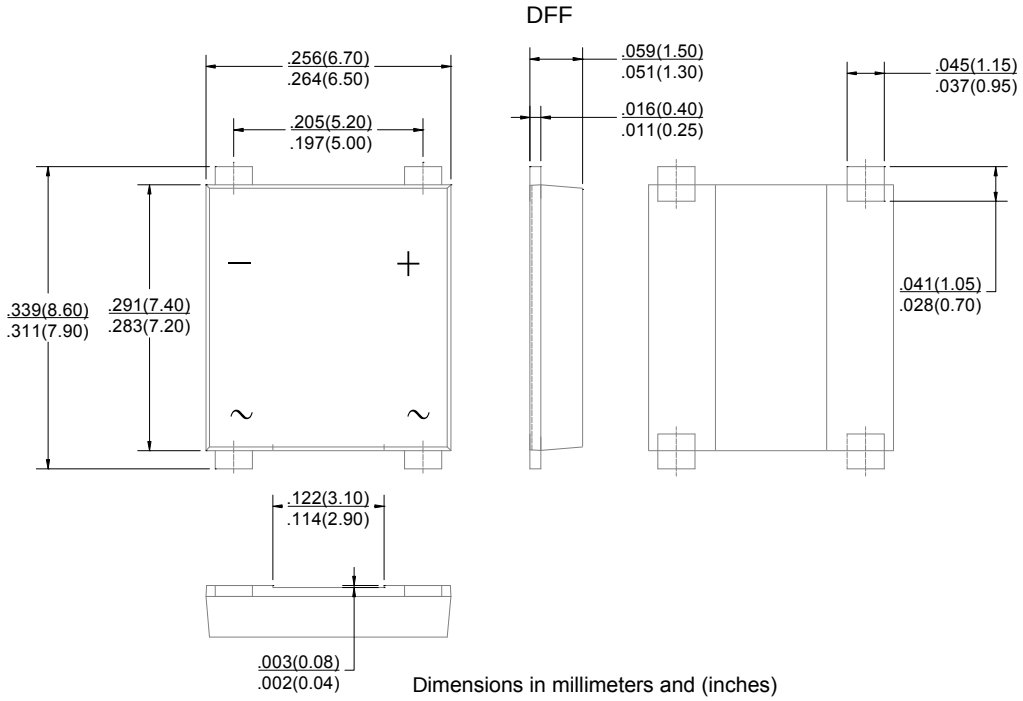
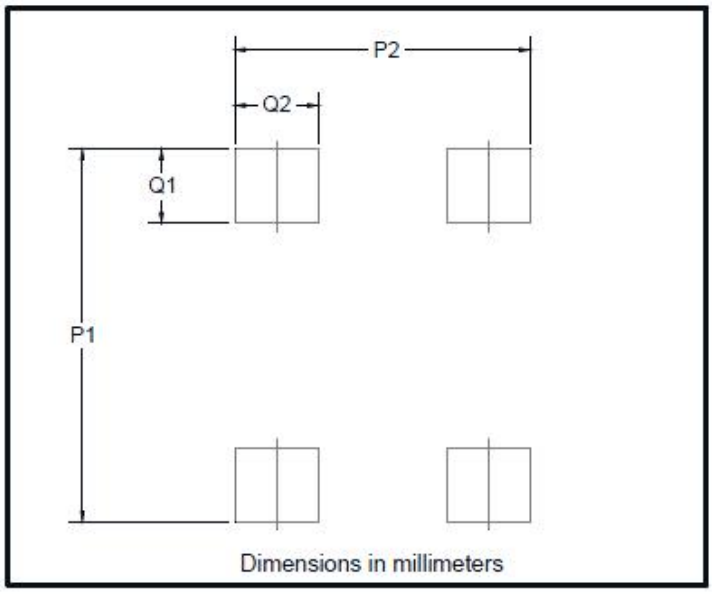
Package Outline



Dimensions in millimeters and (inches)

Suggested pad layout



Dim	Min
P1	9.15
P2	7.10
Q1	1.80
Q2	2.00