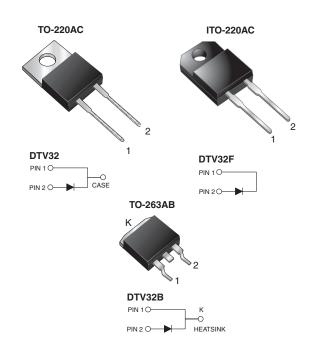
Not for New Design - End of Life - Last Available Purchase Date is 31-May-2011



DTV32, DTV32F, DTV32B

Vishay General Semiconductor

High Voltage Damper Diodes



PRIMARY CHARACTERISTICS					
I _{F(AV)}	10 A				
V _{RRM}	1500 V				
t _{rr}	175 ns				
t _{fr}	280 ns				
V _F	1.35 V				

FEATURES

- Glass passivated chip junction
- High breakdown voltage capability
- · Very fast reverse recovery time
 - Fast forward recovery time



- ROHS COMPLIANT
- High efficiency, low switching losses
- Meets MSL level 1, per J-STD-020, LF maximum peak of 245 °C (for TO-263AB package)
- Solder dip 260 °C, 40 s (for TO-220AC and ITO-220AC package)
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC

TYPICAL APPLICATIONS

For use in high resolution display TV and monitor horizontal deflection application.

MECHANICAL DATA

Case: TO-220AC, ITO-220AC, TO263AB Epoxy meets UL 94 V-0 flammability rating **Terminals:** Matte tin plated leads, solderable per J-STD-002 and JESD 22-B102

E3 suffix for consumer grade, meets JESD 201 class 1A whisker test

Polarity: As marked

Mounting Torque: 10 in-lbs maximum

MAXIMUM RATINGS (T _C = 25 °C unless otherwise noted)						
PARAMETER	SYMBOL	VALUE	UNIT			
Maximum repetitive peak reverse voltage	V _{RRM}	1500	V			
Maximum RMS voltage	V _{RMS}	1050	V			
Maximum DC blocking voltage	V _{DC}	1500	V			
Maximum average forward rectified current (fig. 1)	I _{F(AV)}	10	А			
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	130	А			
Operating junction and storage temperature range	T _J , T _{STG}	- 55 to + 150	°C			
Isolation voltage (ITO-220AC only) from terminal to heatsink t = 1 min	V _{AC}	1500	v			

DTV32, DTV32F, DTV32B

Vishay General Semiconductor



ELECTRICAL CHARACTERISTICS ($T_C = 25$ °C unless otherwise noted)						
PARAMETER	TEST CONDITI	SYMBOL	VALUE	UNIT		
Maximum instantaneous forward voltage ⁽¹⁾	I _F = 6 A I _F = 6 A	T _J = 25 °C T _J = 125 °C	V _F	1.5 1.35	v	
Maximum DC reverse current at V _{RRM}		T _J = 25 °C T _J = 125 °C	I _R	100 1.0	μA mA	
Maximum reverse recovery time	$I_F = 1.0$ A, dI/dt = 50 A/µs, $V_R = 30$ V, $I_{rr} = 0.1$ I_{RM}		t _{rr}	175	ns	
Typical forward recovery time	$I_F = 6 \text{ A}, \text{ dI/dt} = 48 \text{ A/}\mu\text{s}, \text{ V}_{FR} = 3 \text{ V}$		t _{fr}	280	ns	
Peak forward recovery overshoot voltage	I _F = 6 A, dl/dt = 48 A/μs, T _J = 100 °C	typical maximum	V _{FP}	8 12	V	

Note:

(1) Pulse test: 300 μs pulse width, 2 % duty cycle

THERMAL CHARACTERISTICS ($T_C = 25$ °C unless otherwise noted)					
PARAMETER	SYMBOL	DTV32	DTV32B	DTV32F	UNIT
Typical thermal resistance from junction to case	$R_{ ext{ heta}JC}$	2.0		4.0	°C/W

ORDERING INFORMATION (Example)							
PACKAGE	PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE		
TO-220AC	DTV32-E3/45	1.80	45	50/tube	Tube		
ITO-220AC	DTV32F-E3/45	1.95	45	50/tube	Tube		
TO-263AB	DTV32B-E3/45	1.77	45	50/tube	Tube		
TO-263AB	DTV32B-E3/81	1.77	81	800/reel	Tape and reel		

RATINGS AND CHARACTERISTICS CURVES

(T_A = 25 °C unless otherwise noted)

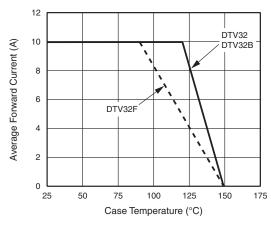


Figure 1. Forward Current Derating Curve

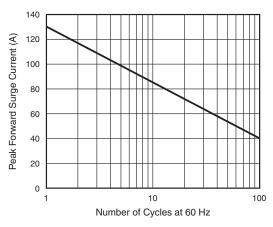


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

For technical questions within your region, please contact one of the following: DiodesAmericas@vishay.com, DiodesAsia@vishay.com, DiodesEurope@vishay.com

Not for New Design - End of Life - Last Available Purchase Date is 31-May-2011



DTV32, DTV32F, DTV32B

Vishay General Semiconductor

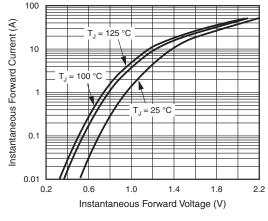


Figure 3. Typical Forward Voltage

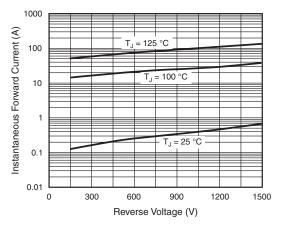


Figure 4. Typical Reverse Current

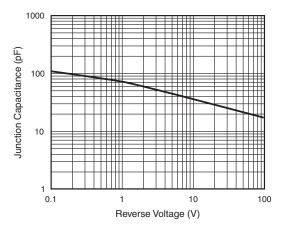


Figure 5. Typical Capacitance

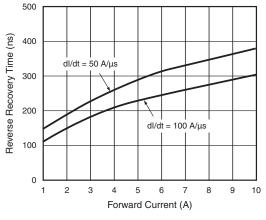
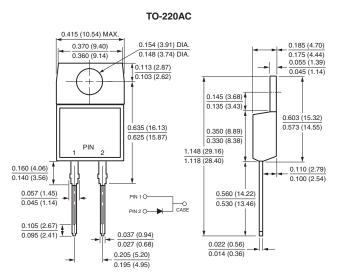


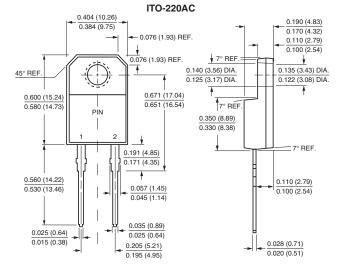
Figure 6. Typical Reverse Recovery Time

DTV32, DTV32F, DTV32B

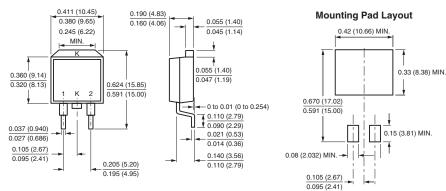
Vishay General Semiconductor







TO-263AB







Vishay

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk and agree to fully indemnify and hold Vishay and its distributors harmless from and against any and all claims, liabilities, expenses and damages arising or resulting in connection with such use or sale, including attorneys fees, even if such claim alleges that Vishay or its distributor was negligent regarding the design or manufacture of the part. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.