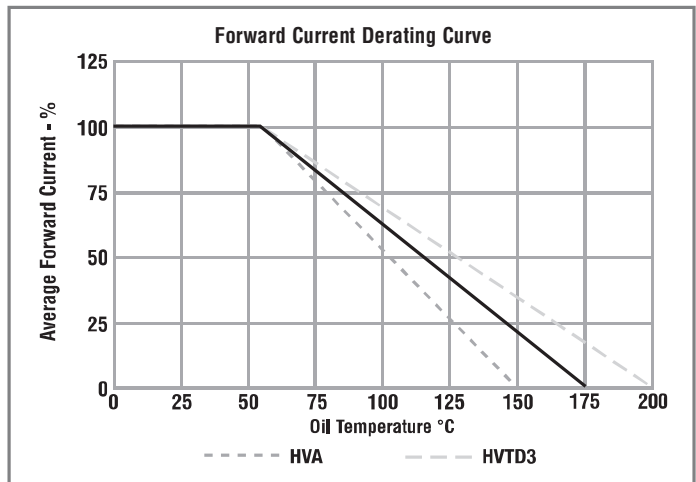
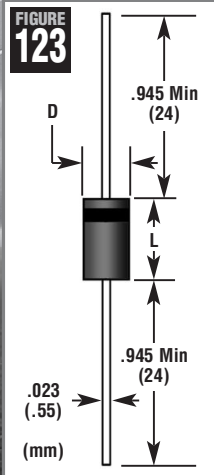




**High Temperature Use  
With Low Reverse Leakage**

**Applications**

- Downhole Use
- Oil Well Drilling
- Automotive



Part Number	Repetitive Peak Reverse Voltage $V_{RRM}$ V	Average Forward Current Max. $I_{FAVM@55°C_{OH}}$ mA	Average Forward Current Max. $I_{FAVM@175°C_{OH}}$ mA	Maximum Forward Voltage Drop $V_F@I_{FAVM@25°C}$ V	Maximum Reverse Current $I_R@V_{RRM@25°C}$ $\mu A$	Maximum Reverse Current $I_R@V_{RRM@175°C}$ $\mu A$	Maximum Surge Forward Current $I_{FSM}^1$ A	Typical Reverse Recovery Time $T_{RR}^2$ nS	Body Length L Inches	Body Diameter D Inches
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HVTDR Series - High Temperature Fast Recovery Diodes										Ambient Operating Temperature Range -55°C to +175°C		Figure 123
HVTDR3	3000	25	1	25.0	0.20	14.0	3	300@175°C	0.26	0.10		
HVTDR4	4000	25	1	25.0	0.20	15.0	3	300@175°C	0.26	0.10		
HVTDR5	5000	25	1	25.0	0.20	16.0	3	300@175°C	0.26	0.10		
HVTDR6	6000	25	1	25.0	0.20	18.0	3	300@175°C	0.26	0.10		
HVTDR7	7000	25	1	25.0	0.20	20.0	3	300@175°C	0.26	0.10		

Part Number	Repetitive Peak Reverse Voltage $V_{RRM}$ V	Average Forward Current Max. $I_{FAVM@55°C_{OH}}$ mA	Average Forward Current Max. $I_{FAVM@200°C_{OH}}$ mA	Maximum Forward Voltage Drop $V_F@I_{FAVM@25°C}$ V	Maximum Reverse Current $I_R@V_{RRM@25°C}$ $\mu A$	Maximum Reverse Current $I_R@V_{RRM@200°C}$ $\mu A$	Maximum Surge Forward Current $I_{FSM}^1$ A	Typical Reverse Recovery Time $T_{RR}$ nS	Body Length L Inches	Body Diameter D Inches
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HVTD Series - Very High Temperature Diodes										Ambient Operating Temperature Range -55°C to +200°C		Figure 123
HVTD3	3000	50	1	25	0.5	18.0 Typ	3	-	0.40	0.10		

Part Number	Max. Reverse Voltage $V_{TA=25°C}$ V	Reverse Avalanche Voltage $V_Z$ $I_R=100\mu A@25°C$ V	Average Forward Current Max. $I_{TA=55°C}$ mA	Max. Forward Voltage Drop $I=1mA@25°C$ V	Max. Reverse Current $V_{RM@25°C}$ $I_R$ $\mu A$	Max. Reverse Current $V_{RM@150°C}$ $I_R$ $\mu A$	Max. Forward Surge Current $I_{FSM}^1$ A	Max. Junction Temperature $T_{JMAX}$ °C	Body Length L Inches	Body Diameter D Inches
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HVA Series Automotive Diodes <sup>3</sup>										Ambient Operating Temperature Range -55°C to +150°C		Figure 123
HVA8J	4000	3200 - 6000	150	8.0	2.0	10	3.0	150	.32	.12		

Notes:

<sup>1</sup> 1/2 Sine(60Hz) @ 25°C

<sup>2</sup>  $T_{RR}$  100nS@25°C

<sup>3</sup> The HVA8J is used in many automotive applications but has not been subjected to the full AEC Q101 testing regime.

Operating & Storage Temperature -55°C to 150°C unless otherwise noted.

$C_j$  Data is not available for standard recovery devices except by special request

$I_R$  is measured in oil after voltage has been applied for 3 minutes on all HVTD series diodes.

HVTDR3 – HVTDR7 have the same  $C_j = 0.36pF$  measured at  $F = 1$  MHz,  $V_R = 0$ ,  $T_A = 25°C$

All devices listed are RoHS compliant.