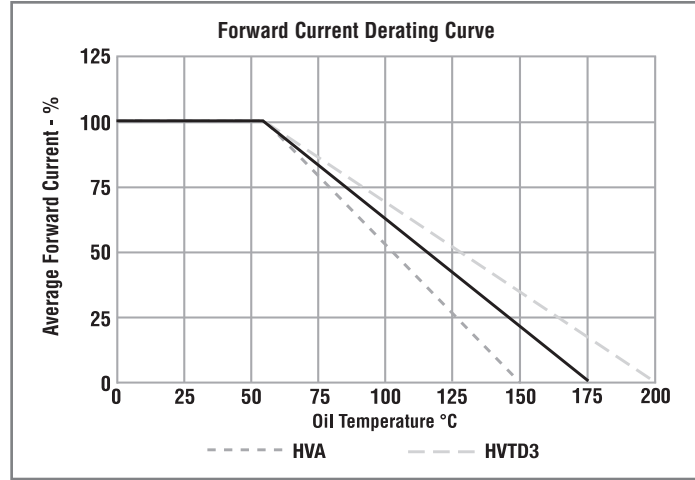
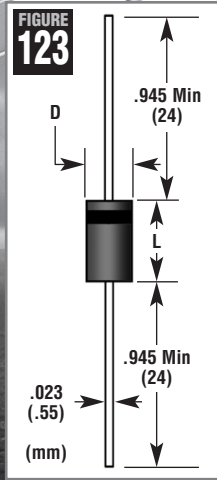


**High Temperature Use  
With Low Reverse Leakage**

**Applications**

- Downhole Use
- Oil Well Drilling
- Automotive



Part Number	Repetitive Peak Reverse Voltage $V_{RRM}$ V	Average Forward Current Max. $I_{FAVM@55°C}$ mA	Average Forward Current Max. $I_{FAVM@175°C}$ mA	Maximum Forward Voltage Drop $V_F@I_{FAVM@25°C}$ V	Maximum Reverse Current $I_{RRM@25°C}$ $\mu A$	Maximum Reverse Current $I_{RRM@175°C}$ $\mu A$	Maximum Forward Surge Current $I_{FSM}^1$ A	Typical Reverse Recovery Time $T_{RR}^2$ nS	Body Length L Inches	Body Diameter D Inches
<b>HVTD Series - High Temperature Diodes</b>										
Ambient Operating Temperature Range -55°C to +175°C										
Figure 123										
HVTD5	5000	50	5	15.0	0.5	15	3	-	0.32	0.12
HVTD5L	5000	35	5	25.0	0.5	5	3	-	0.40	0.10
HVTD6	6000	35	5	25.0	0.5	7.5	3	-	0.40	0.10
HVTD7	7000	35	5	25.0	0.5	7.5	3	-	0.40	0.10
<b>HVTDR Series - High Temperature Fast Recovery Diodes</b>										
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. $I_{FAVM@55°C}$ mA	Average Forward Current Max. $I_{FAVM@200°C}$ mA	Maximum Forward Voltage Drop $V_F@I_{FAVM@25°C}$ V	Maximum Reverse Current $I_{RRM@25°C}$ $\mu A$	Maximum Reverse Current $I_{RRM@200°C}$ $\mu A$	Maximum Forward Surge Current $I_{FSM}^1$ A	Typical Reverse Recovery Time $T_{RR}$ nS	Body Length L Inches	Body Diameter D Inches
<b>HVTD Series - Very High Temperature Diodes</b>										
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 $T_A=25°C$ V	Reverse Avalanche Voltage $V_Z$ $I_R=100\mu A@25°C$ V	Average Forward Current Max. $T_A=55°C$ mA	Max. Forward Voltage Drop $I_F=1mA@25°C$ V	Max. Reverse Current $V_{RRM@25°C}$ $I_R$ $\mu A$	Max. Reverse Current $V_{RRM@150°C}$ $I_R$ $\mu A$	Max. Forward Surge Current $I_{FSM}^1$ A	Max. Junction Temperature $T_{JMAX}$ °C	Body Length L Inches	Body Diameter D Inches
<b>HVA Series Automotive Diodes<sup>3</sup></b>										
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.