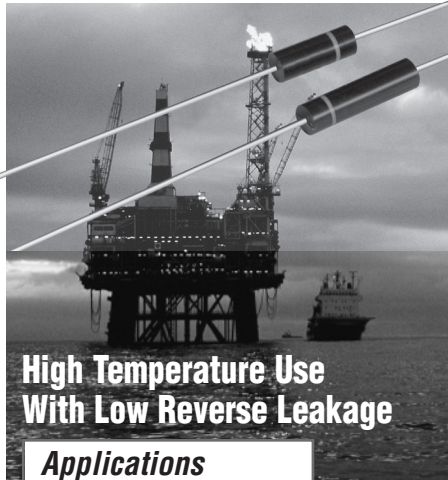
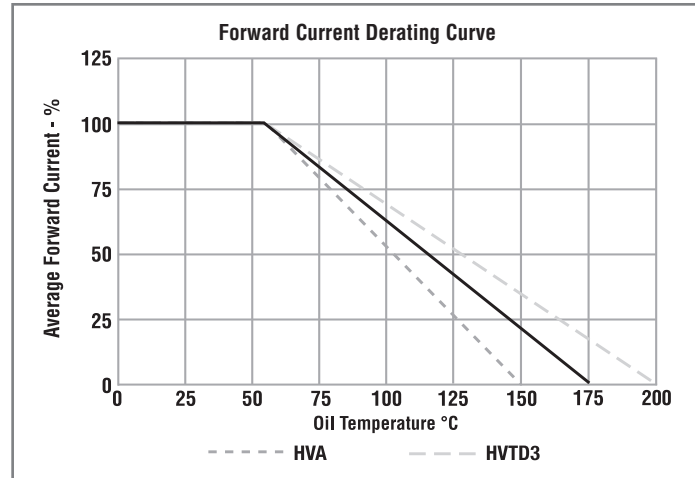
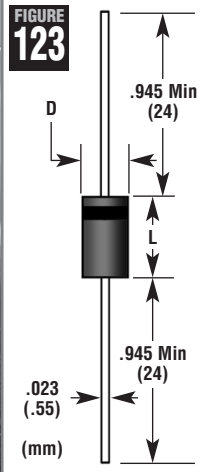




High Temperature Use With Low Reverse Leakage

Applications

- Downhole Use
- Oil Well Drilling
- Automotive



Part Number	Repetitive Peak Reverse Voltage V_{RRM} V	Average Forward Current Max. $I_{FAVM@55^{\circ}C}$ mA	Average Forward Current Max. $I_{FAVM@175^{\circ}C}$ mA	Maximum Forward Voltage Drop $V_F@I_{FAVM@25^{\circ}C}$ V	Maximum Reverse Current $I_{RR}@25^{\circ}C$ μA	Maximum Reverse Current $I_{RR}@175^{\circ}C$ μA	Maximum Forward Surge Current I_{FSM}^1 A	Typical Reverse Recovery Time T_{RR}^2 nS	Body Length L Inches	Body Diameter D Inches
HVTD Series - High Temperature Diodes										
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
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. $I_{FAVM@55^{\circ}C}$ mA	Average Forward Current Max. $I_{FAVM@200^{\circ}C}$ mA	Maximum Forward Voltage Drop $V_F@I_{FAVM@25^{\circ}C}$ V	Maximum Reverse Current $I_{RR}@25^{\circ}C$ μA	Maximum Reverse Current $I_{RR}@200^{\circ}C$ μA	Maximum Forward Surge Current I_{FSM}^1 A	Typical Reverse Recovery Time T_{RR} nS	Body Length L Inches	Body Diameter D Inches
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 $V_{TA=25^{\circ}C}$ V	Reverse Avalanche Voltage V_Z $I_R=100\mu A@25^{\circ}C$ V	Average Forward Current Max. $I_{TA=55^{\circ}C}$ mA	Max. Forward Voltage Drop $V_F@I_R=1mA@25^{\circ}C$ V	Max. Reverse Current $I_{RR}@25^{\circ}C$ μA	Max. Reverse Current $I_{RR}@150^{\circ}C$ μA	Max. Forward Surge Current I_{FSM}^1 A	Max. Junction Temperature T_{JMAX} °C	Body Length L Inches	Body Diameter D Inches
HVA Series Automotive Diodes³										
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:

¹ ½ Sine(60Hz) @ 25°C

² T_{RR} 100nS@25°C

³ 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 $F = 1\text{ MHz}$, $V_R = 0$, $T_A = 25^{\circ}C$

All devices listed are RoHS compliant.