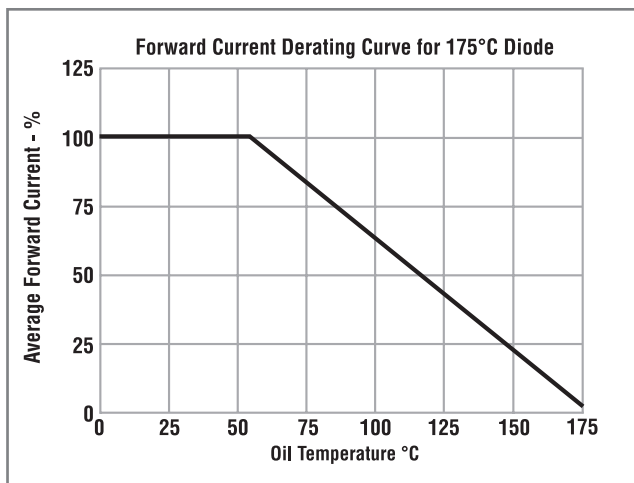


## High Temperature Use With Low Reverse Leakage

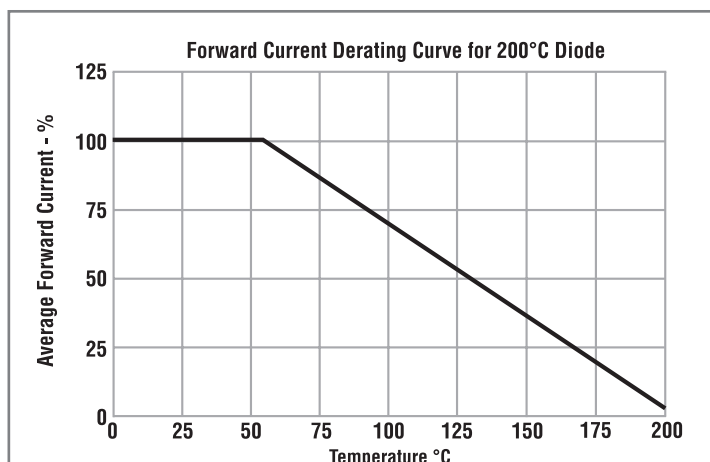
### Applications

- Downhole Use
- Oil Well Drilling
- Automotive



HVCA Number	Repetitive Peak Reverse Voltage $V_{RRM}$ (Volts)	Avg. Forward Current Max $I_{FAVM@55°C}$ Oil (mA (milliAmps))	Avg. Forward Current Max. $I_{FAVM @ 175°C}$ Oil (mA (milliAmps))	Max. Forward Voltage Drop $V_F@I_{FAVM@25°C}$ (Volts)	Max. Reverse Current $I_R@25°C$ $V_{RRM @ 25°C}$ (μA (microAmps))	Max. Reverse Current $I_R@175°C$ $V_{RRM@175°C}$ (μA (microAmps))	Max. Surge Current $I_{FSM}$ (8.3ms) (A (Amps))	Typical Reverse Recovery Time $T_{RR}$ (nsec)	Fig. 123 Length (inches)	Diameter (inches)
<b>High Temp Diode</b>										
<b>Ambient Operating Temperature Range -55°C to +175°C</b>										
HVTD5	5000	50	5	15	0.5	15	3	-	0.32	0.12
HVTD5L	5000	35	5	25	0.5	5	3	-	0.47	0.12
HVTD6	6000	35	5	25	0.5	7.5	3	-	0.47	0.12
HVTD7	7000	35	5	25	0.5	7.5	3	-	0.47	0.12
<b>Fast Recovery High Temp Diode</b>										
<b>Ambient Operating Temperature Range -55°C to +175°C</b>										
HVTDR3	3000	25	1	25.0	0.20	14.0	3	100 @25°C 300@175°C	0.26	0.10
HVTDR4	4000	25	1	25.0	0.20	15.0	3	100 @25°C 300@175°C	0.26	0.10
HVTDR5	5000	25	1	25.0	0.20	16.0	3	100 @25°C 300@175°C	0.26	0.10
HVTDR6	6000	25	1	25.0	0.20	18.0	3	100 @25°C 300@175°C	0.26	0.10
HVTDR7	7000	25	1	25.0	0.20	20.0	3	100 @25°C 300@175°C	0.26	0.10

## High Temperature Custom Assemblies are Available



HVCA Number	Repetitive Peak Reverse Voltage $V_{RRM}$ (Volts)	Avg. Forward Current Max $I_{FAVM@55°C}$ Oil (mA (milliAmps))	Avg. Forward Current Max. $I_{FAVM @ 200°C}$ Oil (mA (milliAmps))	Max. Forward Voltage Drop $V_F@I_{FAVM@25°C}$ (Volts)	Max. Reverse Current $I_R@25°C$ $V_{RRM @ 25°C}$ (μA (microAmps))	Max. Reverse Current $I_R@200°C$ $V_{RRM@200°C}$ (μA (microAmps))	Max. Surge Current $I_{FSM}$ (8.3ms) (A (Amps))	Typical Reverse Recovery Time $T_{RR}$ (nsec)	Fig. 123 Length (inches)	Diameter (inches)
<b>High Temp Diode</b>										
<b>Ambient Operating Temperature Range -55°C to +200°C</b>										
HVTD3	3000	50	1	25	0.5	30.0 Max 18.0 Typ	3	-	0.47	0.12

Note:  $I_R$  is measured in oil after voltage has been applied for 3 minutes on all HVTD Series Diodes.