

Ultra Fast Recovery Rectifiers UFR30, 31 & 32

Number	Working Peak Reverse Voltage	Peak Reverse Voltage
UFR3005*	50V	50V
UFR3010*	100V	100V
UFR3015*	150V	150V
UFR3020*	200V	200V
UFR3120*	300V	300V
UFR3130*	400V	400V
UFR3140*	500V	500V
UFR3150*	600V	600V
UFR3250*	700V	700V
UFR3260*	800V	800V
UFR3270*	800V	800V
UFR3280*	800V	800V

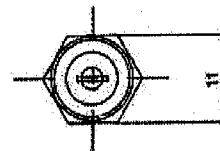
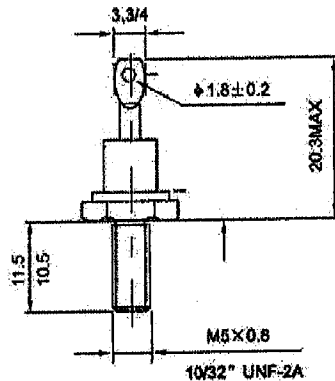
*Add Suffix R For Reverse Polarity

- Ultra Fast Recovery Rectifier
- 175°C Junction Temperature
- VRRM 50 to 800V
- High Reliability
- 30 Amps current rating
- t_{RR} 35 to 60 nsec maximum

Electrical Characteristics				
	UFR30	UFR31	UFR32	
Average forward current	I _{F(AV)} 30A	30A	30A	Square wave, R _{θJC} = 1.8°C/W
Case Temperature	T _C 127°C	110°C	107°C	
Maximum surge current	I _{FSM} 500A	400A	300A	8.3 ms, half sine, T _J = 175°C
Max peak forward voltage	V _{FM} .975V	1.25V	1.35V	I _{FM} = 30A; T _J = 25°C
Max reverse recovery time	t _{RR} 35 ns	50 ns	80 ns	1/2A, 1A, 1/4A, T _J = 25°C
Typical reverse recovery time	t _{RR} 28 ns	36 ns	50 ns	1/2A, 1A, 1/4A, T _J = 25°C
Max peak reverse current	I _{RM} —	1.0 mA	—	V _{RRM} , T _J = 125°C
Max peak reverse current	I _{RM} —	15 μA	—	V _{RRM} , T _J = 25°C
Typical Junction Capacitance	C _J 140 pF	115 pF	100 pF	V _R = 10V, f = 1Mhz, T _J = 25°C

*Pulse test: Pulse width 300 μsec, Duty cycle 2%

Thermal and Mechanical Characteristics		
Storage temp range	T _{STG}	-65°C to 175°C
Operating junction temp range	T _J	-65°C to 175°C
Max thermal resistance	R _{θJC}	1.8°C/W Junction to Case
Typical thermal resistance	R _{θJC}	1.3°C/W Junction to Case
Typical thermal resistance	R _{θCS}	0.4°C/W Case to sink
Max mounting torque		15.0 inch pounds
Typical Weight		0.2 ounces (6.0 grams)



DO-4



Quality Semi-Conductors