

High-reliability discrete products and engineering services since 1977

UFR10130-UFR10150

ULTRA FAST RECOVERY RECTIFIERS

FEATURES:

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number
- Available Non-RoHS (standard) or RoHS compliant (add PBF suffix)

MAXIMUM RATINGS

Symbol	Test Conditions				
T_{stg}	-65° to 175°C				
T _J	-65° to 175°C				
R _{eJC}	0.45°C/W junction to case				
R _{ecs}	0.5°C/W case to sink				
	25-30 inch pounds				
	0.52 ounce (14.7 grams) typical				
	T _{stg} T _J R _{eJC}				

ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	UFR10030	UFR10040	UFR10050	Test Conditions
Working peak reverse voltage	V_{RWM}	300V	400V	500V	
Repetitive peak reverse voltage	V _{RRM}	300V	400V	500V	
Average forward current	I _{F(AV)}		100A		$T_C = 140$ °C, square wave, $R_{\Theta JC} = 0.45$ °C/W
Maximum surge current	I _{FSM}	1600A			8.3ms, half-sine, T _J = 175°C
Maximum peak forward voltage	V _{FM}		1.25V		I _{FM} = 100A, T _J = 25°C*
Maximum reverse recovery time	t _{rr}		100ns		$I_F = 1A$, $V_R = 30V$, $di/dt = -50A/\mu s$
Maximum peak reverse current	I _{RM}		5mA		V _{RRM} , T _J = 125°C
Maximum peak reverse current	I _{RM}		25μΑ		V _{RRM} , T _J = 25°C
Typical junction capacitance	C _J		240pF		V _R = 10V, f = 1MHz, T _J = 25°C

Pulse test: pulse width 300µsec, duty cycle 2%



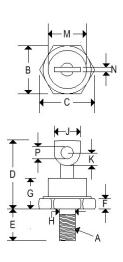
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MECHANICAL CHARACTERISTICS

Case	DO-5(R)	
Marking	Alpha-numeric	
Normal polarity	Cathode is stud	
Reverse polarity	Anode is stud (add "R" suffix)	



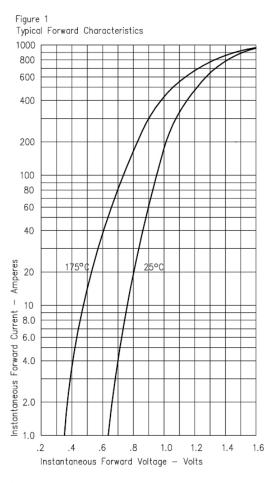
	DO-5(R)							
	Inc	hes	Millimeters					
	Min Max		Min	Max				
Α	¼-28 UNF2A threads							
В	0.669	0.688	16.990	17.480				
С	-	0.794	-	20.160				
D	-	1.000	-	25.400				
E	0.422	0.453	10.720	11.510				
F	0115	0.200	2.920	5.080				
G	-	0.450	-	11.430				
Н	0.220	0.249	5.580	6.320				
J	0.250	0.375	6.350	9.530				
K	0.156	ı	3.960	1				
М	-	0.667	-	16.940				
N	0.030	0.080	0.760	2.030				
Р	0.140	0.175	3.560	4.450				

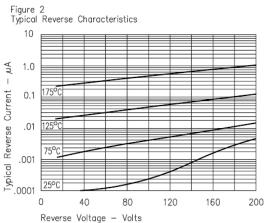


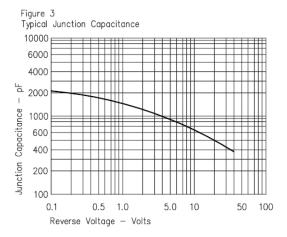
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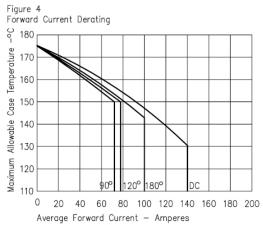
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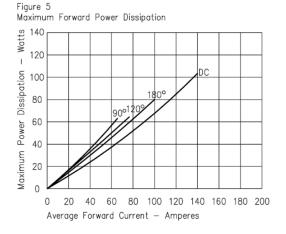
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