

UF110-UF120

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 as non-RoHS (Sn/Pb plating), standard, and as RoHS by adding "-PBF" suffix.

ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	UF110	UF115	UF120	Test Conditions
Working peak reverse voltage	V_{RWM}	100V	150V	200V	
Repetitive peak reverse voltage	V_{RRM}	100V	150V	200V	
Average forward current	$I_{F(AV)}$	1.0A			$T_L = 135^\circ\text{C}$, square wave, $R_{\theta JL} = 15^\circ\text{C/W}$, $L = \frac{1}{4}"$
Maximum surge current	I_{FSM}	35A			8.3ms, half-sine, $T_J = 175^\circ\text{C}$
Maximum peak forward voltage	V_{FM}	0.75V			$I_{FM} = 0.1\text{A}$, $T_J = 25^\circ\text{C}^*$
Maximum peak forward voltage	V_{FM}	0.95V			$I_{FM} = 1.0\text{A}$, $T_J = 25^\circ\text{C}^*$
Maximum reverse recovery time	t_{rr}	30ns			1/2A, 1A, 1/4A, $T_J = 25^\circ\text{C}$
Maximum peak reverse current	I_{RM}	5 μA			V_{RRM} , $T_J = 25^\circ\text{C}$
Typical junction capacitance	C_J	10pF			$V_R = 10\text{V}$, $T_J = 25^\circ\text{C}$

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

THERMAL CHARACTERISTICS

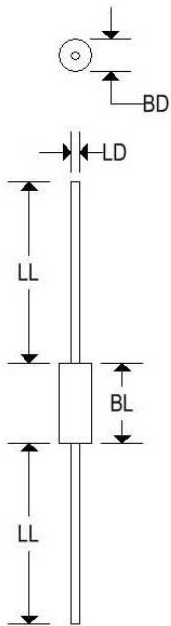
Characteristics	Symbol	Test Conditions
Storage temperature range	T_{stg}	-55° to 175°C
Operating junction temperature range	T_J	-55° to 175°C
Maximum thermal resistance, $L = \frac{1}{4}"$	$R_{\theta JL}$	15°C/W junction to lead

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MECHANICAL CHARACTERISTICS

Case:	DO-41
Marking:	Alpha-Numeric
Polarity:	Cathode Band



	DO-41			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	-	0.107	-	2.720
BL	-	0.205	-	5.207
LD	0.028	0.034	0.711	0.864
LL	1.000	-	25.400	-

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Figure 1
Typical Forward Characteristics

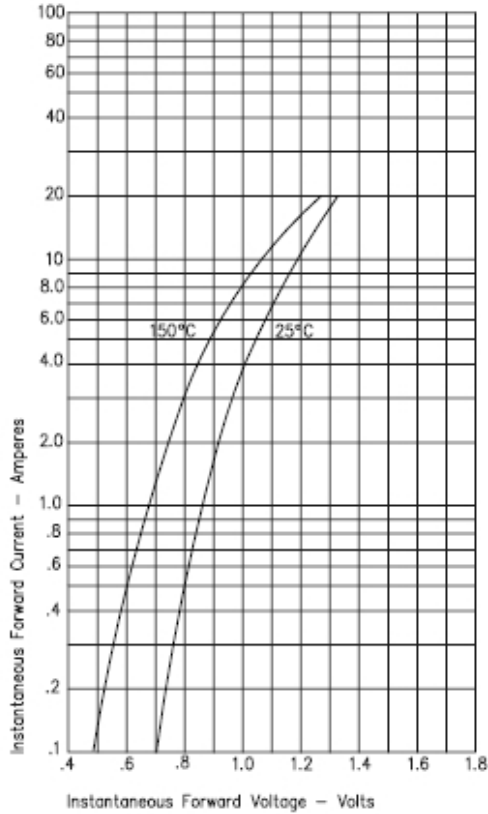


Figure 3
Typical Junction Capacitance

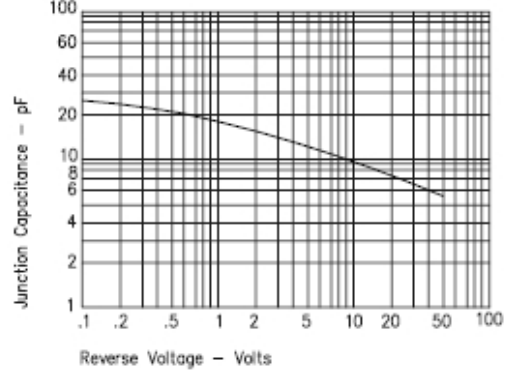


Figure 2
Typical Reverse Characteristics

