



SUMMATE

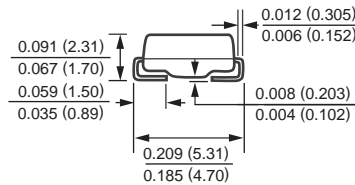
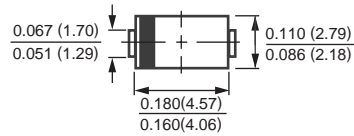
UFM101 - UFM108

SUPER FAST RECOVERY RECTIFIER DIODES

VOLTAGE RANGE: 50 - 400V
CURRENT: 1.0 A



DO-214AC



Dimensions in inches and (millimeters)

Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise specified

RATINGS	SYMBOL	UFM101	UFM102	UFM103	UFM104	UFM105	UFM106	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	Volts
Maximum RMS Volts	V_{RMS}	35	70	105	140	210	280	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	Volts
Maximum Average Forward Current at $T_A = 55^\circ\text{C}$	I_o	1.0						Amps
Peak Forward Surge Current I_{FM} (surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30						Amps
Typical Junction Capacitance (Note 2)	C_J	15				10		pF
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to + 175						$^\circ\text{C}$

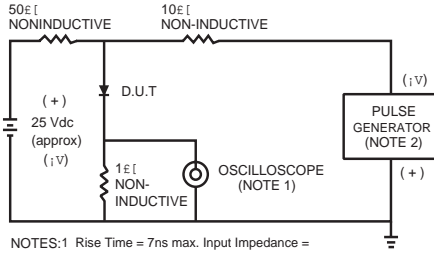
ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	UFM101	UFM102	UFM103	UFM104	UFM105	UFM106	UNITS
Maximum Forward Voltage at 1.0A DC	V_F	0.92				1.20		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5.0						uAmps
		50						
Maximum Reverse Recovery Time (Note 1)	t_{rr}	20						nSec

NOTES : 1. Test Conditions: $I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$.
 2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.



FIG. 1 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1 Rise Time = 7ns max. Input Impedance = 1 megohm, 22 pF.
 2. Rise Time = 10ns max. Source Impedance = 50 ohms.

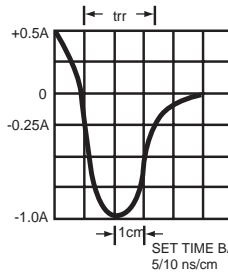


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

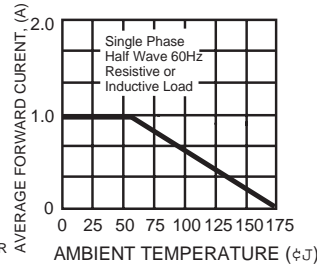


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

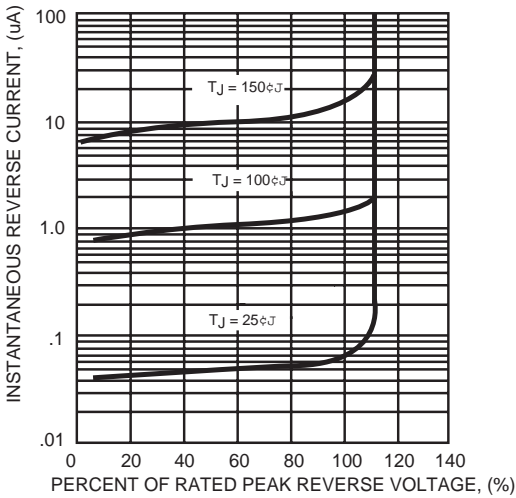


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

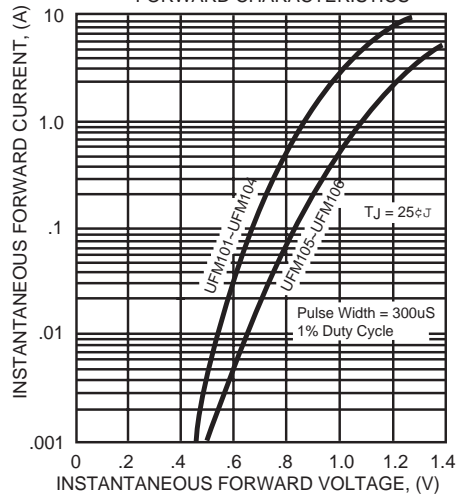


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

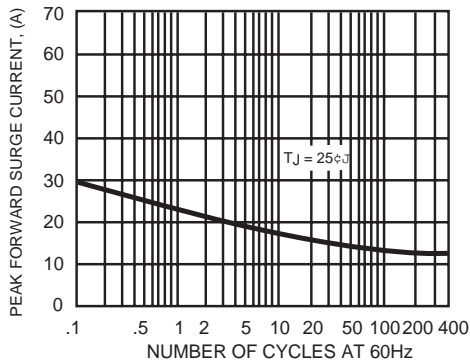


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

