

ULTRA FAST RECTIFIERS	REVERSE VOLTAGE - 50 to 1000 Volts FORWARD CURRENT - 5.0 Amperes
<p>FEATURES</p> <ul style="list-style-type: none"> ● Low cost ● Diffused junction ● Ultra fast switching for high efficiency ● Low reverse leakage current ● Low forward voltage drop ● High current capability ● The plastic material carries UL recognition 94V-0 <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> ● Case: JEDEC DO-27 molded plastic ● Polarity: Color band denotes cathode ● Weight: 0.04 ounces , 1.1 grams ● Mounting position: Any 	<p>DO- 27</p> <p style="text-align: center;">Dimensions in inches and (millimeters)</p>

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave ,60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	UF5001	UF5002	UF5003	UF5004	UF5005	UF5006	UF5007	UF5008	UNIT	
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	300	400	600	800	1000	V	
Maximum RMS Voltage	VRMS	35	70	140	210	280	420	560	700	V	
Maximum DC Blocking Voltage	VDC	50	100	200	300	400	600	800	1000	V	
Maximum Average Forward Rectified Current @TA =55 °C	I(AV)	5.0								A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	IFSM	200								A	
Peak Forward Voltage at 5.0A DC	VF	1.0			1.3		1.7			V	
Maximum DC Reverse Current @TJ=25°C at Rated DC Blocking Voltage @TJ=100°C	IR	5.0								uA	
Maximum Reverse Recovery Time (Note1)	TRR	50					75				nS
Typical Junction Capacitance (Note2)	CJ	75					50				pF
Typical Thermal Resistance (Note3)	RθJA	20								°C/W	
Operating Temperature Range	TJ	-50 to +125								°C	
Storage Temperature Range	TSTG	-50 to +150								°C	

NOTES: 1.Measured with IF=0.5A, IR=1A , IRR=0.25A
 2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC
 3.Thermal resistance junction to ambient

FIG. 1 – TYPICAL FORWARD CURRENT DERATING CURVE

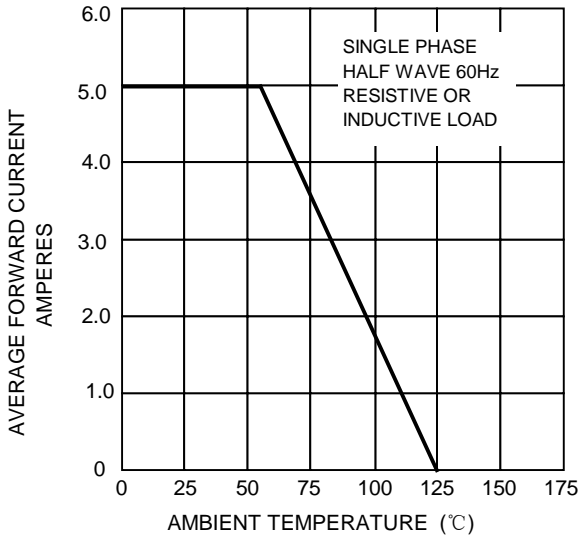


FIG. 2 – TYPICAL REVERSE CHARACTERISTICS

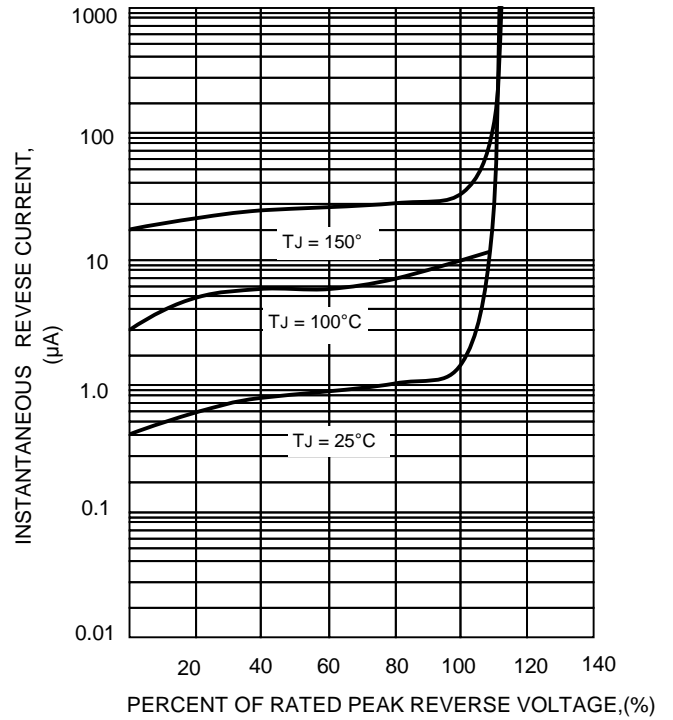


FIG. 4 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

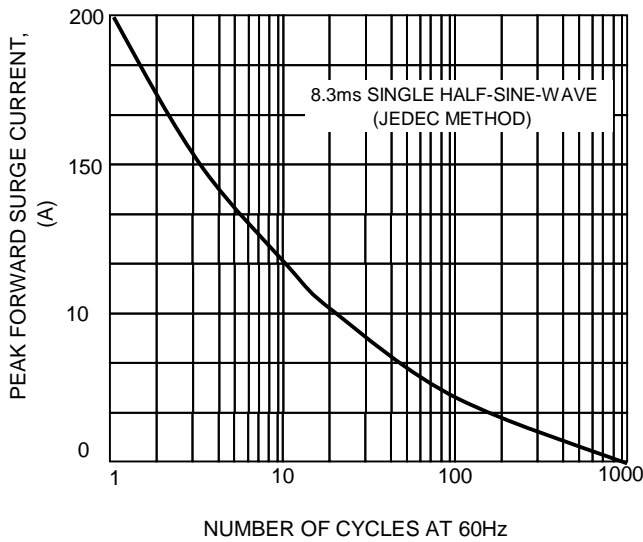


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

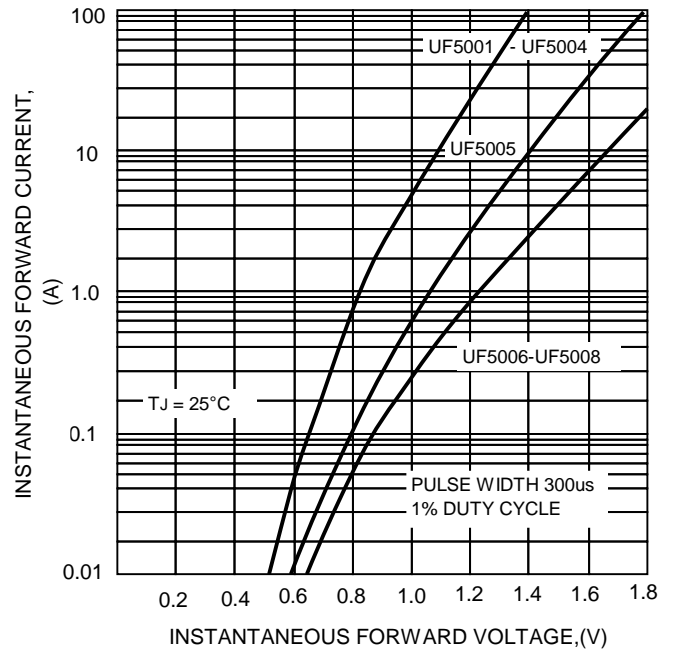


FIG. 5 – TYPICAL JUNCTION CAPACITANCE

