

Kingtronics®**UF5401 THRU
UF5408****HIGH EFFICIENCY RECTIFIERS****REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 3.0 Ampere****FEATURES**

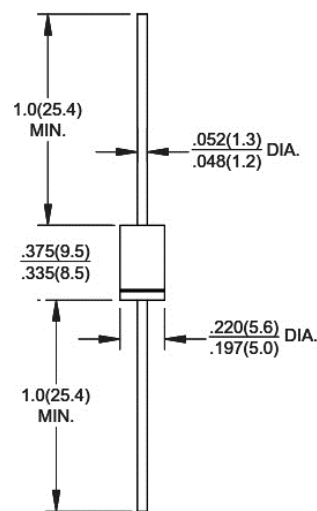
Low power loss, high efficiency
 Low forward voltage drop
 Low leakage current
 High forward surge capability
 High reliability
 High temperature soldering guaranteed
 260°C/10 seconds, 0.375" (9.5mm) lead length at 5 lbs(2.3kg) tension

MECHANICAL DATA

Case: Transfer molded plastic
 Epoxy: UL94V-0 rate flame retardant
 Polarity: Color band denotes cathode end
 Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
 Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

DO-201AD (DO-27)**Dimensions in inches and (millimeters)**

PARAMETER	SYMBOL	UF 5400	UF 5401	UF 5402	UF 5403	UF 5404	UF 5406	UF 5407	UF 5408	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	600	800	1000	VOLTS
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	420	560	700	VOLTS
Maximum DC Blocking Voltage	V_{DC}	50	100	200	300	400	600	800	1000	VOLTS
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=50^\circ\text{C}$	$I_{(AV)}$	3.0								Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150								Amps
Maximum instantaneous forward voltage at 3.0A	V_F	1.0		1.3		1.7			VOLTS	
Maximum DC Reverse Current at Rated DC blocking voltage	I_R	$T_A=25^\circ\text{C}$								uA
		$T_A=100^\circ\text{C}$								
Maximum reverse recovery time (NOTE 1)	t_{rr}	50					70			ns
Typical Junction Capacitance (Note 2)	C_J	70					50			pF
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150								°C

1- Reverse Recovery 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 VDC.

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RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

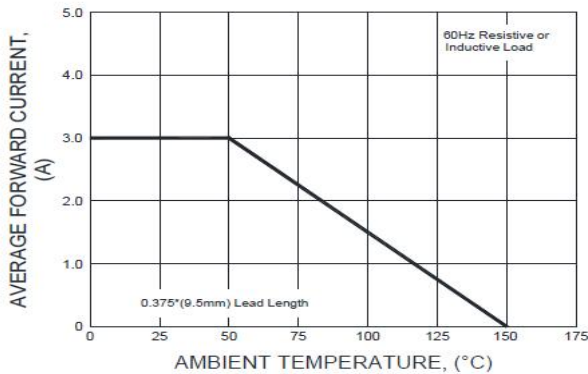


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

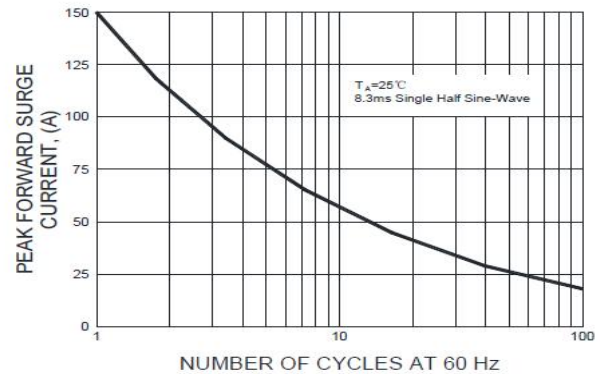


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

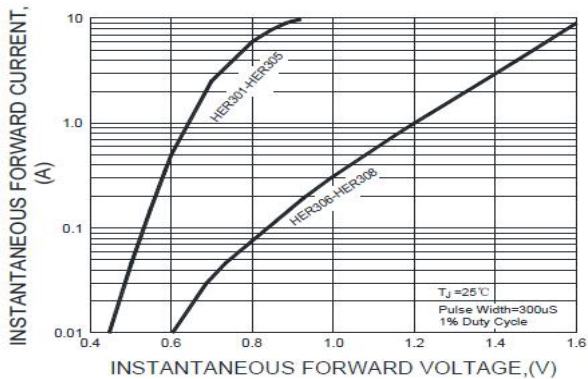


FIG.3-TYPICAL REVERSE CHARACTERISTICS

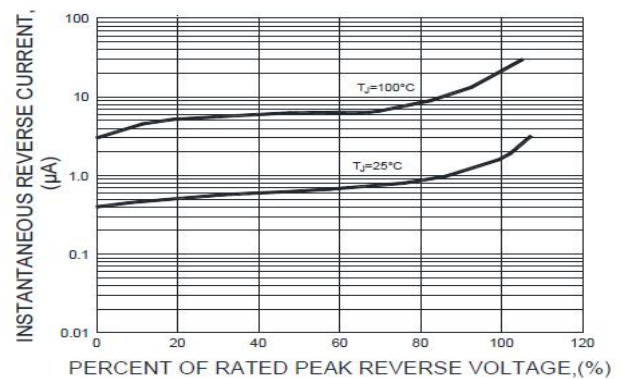


FIG.5-TYPICAL JUNCTION CAPACITANCE

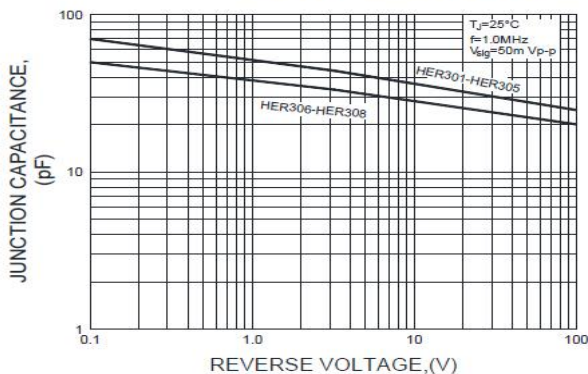
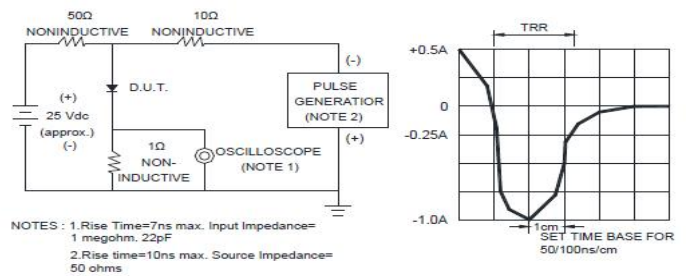


FIG.6-TEST CIRCUIT DIAGRAM AND FORWARD SURGE CURRENT



Note: Specifications are subject to change without notice.

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