

UF5400-E thru UF5408-E

ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

Voltage: 50 to 1000V

Current: 3.0A



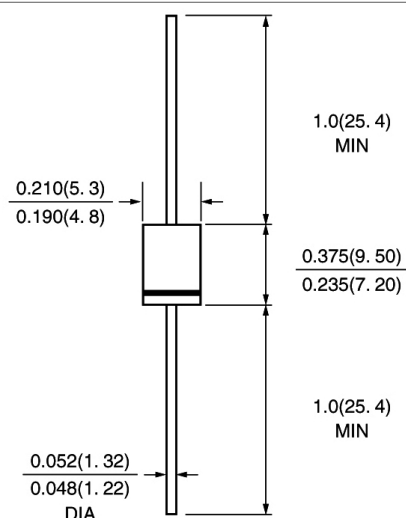
FEATURE

Low power loss
High surge capability
Ultra-fast recovery time for high efficiency
High temperature soldering guaranteed
250°C/10sec/0.375" lead length at 5 lbs tension
Halogen Free

MECHANICAL DATA

Terminal: Plated axial leads solderable per
MIL-STD 202E, method 208C
Case: Molded with UL-94 Class V-0 recognized Halogen
Free Epoxy
Polarity: color band denotes cathode
Mounting position: any

DO-201AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated,
for capacitive load, derate current by 20%)

	Symbol	UF5 400- E	UF5 401- E	UF5 402- E	UF5 403- E	UF5 404- E	UF5 405- E	UF5 406- E	UF5 407- E	UF5 408- E	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	300	400	500	600	800	1000	V
Maximum RMS Voltage	Vrms	35	70	140	210	280	350	420	560	700	V
Maximum DC blocking Voltage	Vdc	50	100	200	300	400	500	600	800	1000	V
Maximum Average Forward Rectified Current 3/8" lead length at Ta =55°C	If(av)	3.0									A
Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	Ifsm	150.0									A
Maximum Instantaneous Forward Voltage at Rated forward current	Vf	1.0					1.7				V
Maximum DC Reverse Current Ta =25°C At rated DC blocking voltage Ta =125°C	Ir	10.0 100.0									μA
Maximum Reverse Recovery Time (Note 1)	Trr	50					75				nS
Typical Junction Capacitance (Note 2)	Cj	45.0					36.0				pF
Typical Thermal Resistance (Note 3)	Rth(ja) Rth(jl)	20.0 8.5									°C/W
Storage and Operating Junction Temperature	Tstg, Tj	-55 to +150									°C

Note:

1. Reverse Recovery Condition I_f = 0.5A, I_r = 1.0A, I_{rr} = 0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V_{dc}
3. Thermal Resistance from Junction to Ambient and Junction to Lead with 3/8" lead length, both leads attached to heatsink

RATINGS AND CHARACTERISTIC CURVES UF5400-E THRU UF5408-E

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE

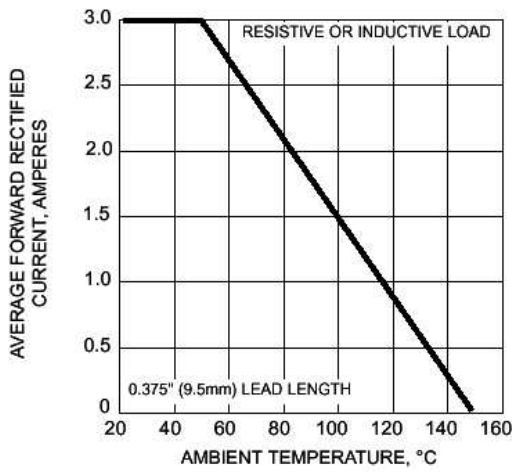


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

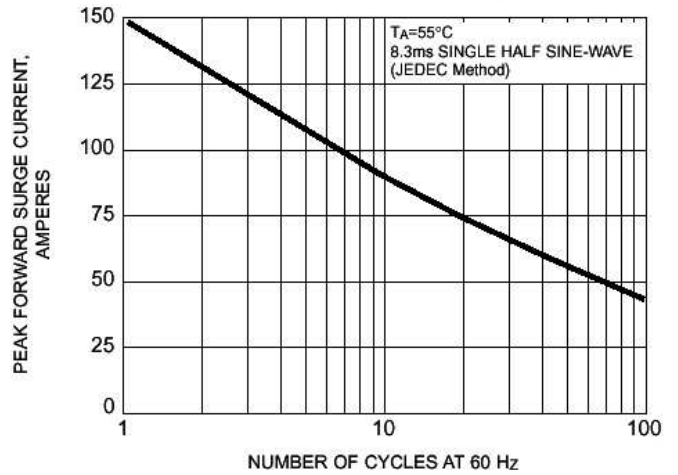


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS

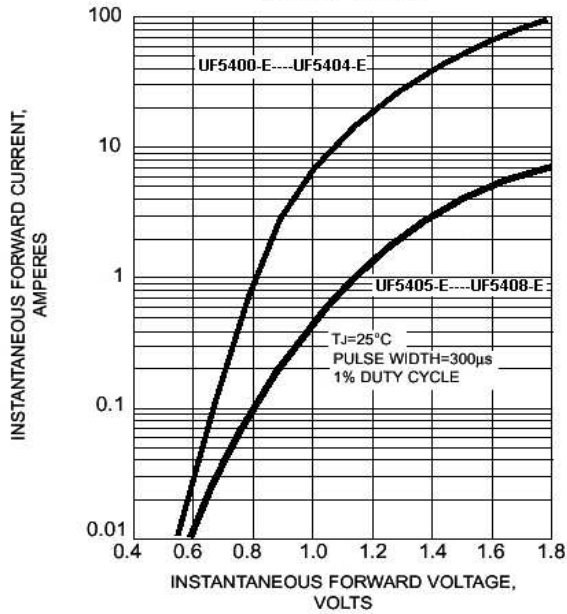


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

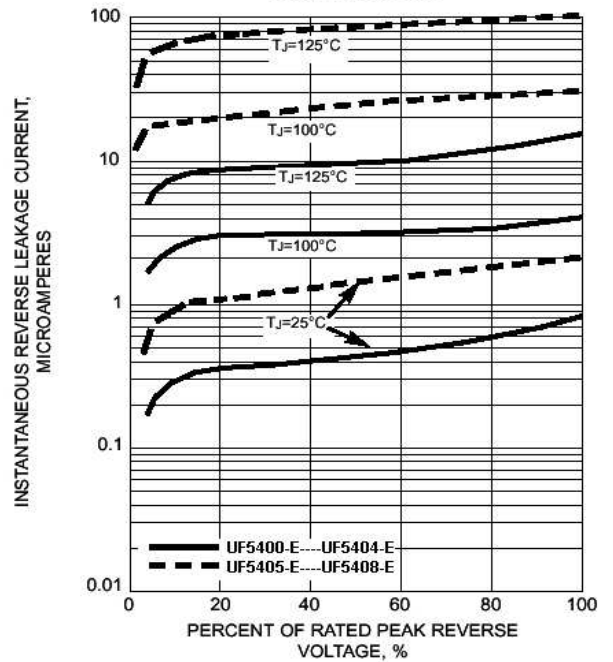


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

