

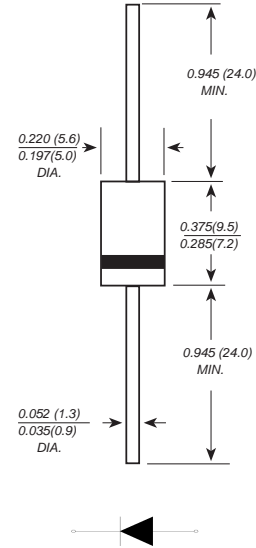
UF5400~UF5408

3.0Amp Ultra Fast Rectifiers

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Open Junction chip
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed
250°C/10 seconds at terminals

DO-27



Dimensions in inches and (millimeters)

Mechanical Data

- Case** : Molded plastic body
- Terminals** : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity** : Polarity symbol marking on body
- Mounting Position** : Any
- Weight** : 0.0345 ounce, 0.98 grams

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 current derate by 20%.

Parameter	SYMBOLS	UF	UF	UF	UF	UF	UF	UF	UF	UF	UNITS
		5400	5401	5402	5403	5404	5405	5406	5407	5408	
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	300	400	500	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	210	280	350	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	300	400	500	600	800	1000	V
Maximum average forward rectified current at T _L =100°C	I _(AV)	3.0									A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	150.0									A
Maximum instantaneous forward voltage at 3.0A	V _F	1.0		1.40			1.7			V	
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =125°C	I _R	10.0 500									uA
Maximum reverse recovery time(Note 1)	T _{rr}	50					75				ns
Typical junction capacitance (Note2)	C _J	70.0									pF
Typical thermal resistance	R _{qJA}	45.0									°C/W
Operating junction and storage temperature range	T _J ,T _{STG}	-55 to +150									°C

Note: 1.Reverse recovery time test condition: I_F=0.5A I_R=1.0A I_{rr}=0.25A
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

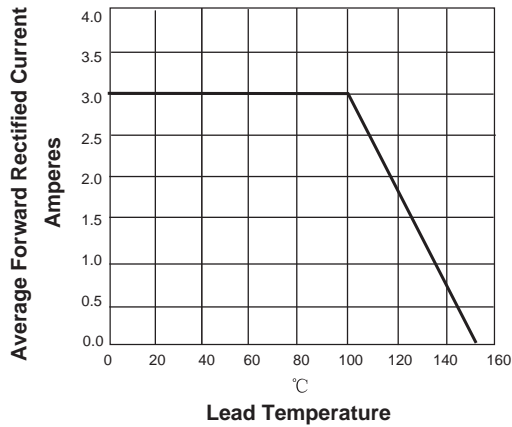


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

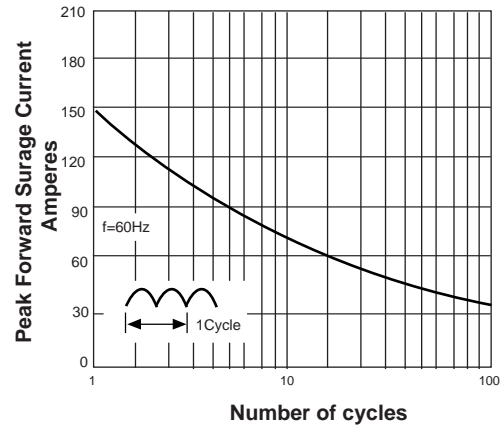


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

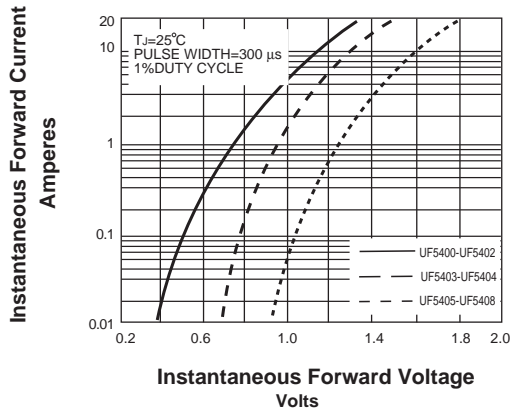


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

