

UF5400 THRU UF5408

3.0AMP HIGH EFFICIENCY RECTIFIERS



FEATURES

- *Low forward voltage drop
- *High current capability
- *High reliability
- *High surge current capability
- *High speed switching
- *Both normal and Pb free product are available:
- *Normal: 80~95% Sn, 5~20% Pb
- *Pb free: 99% Sn above can meet RoHS environment substance directive request

MECHANICAL DATA

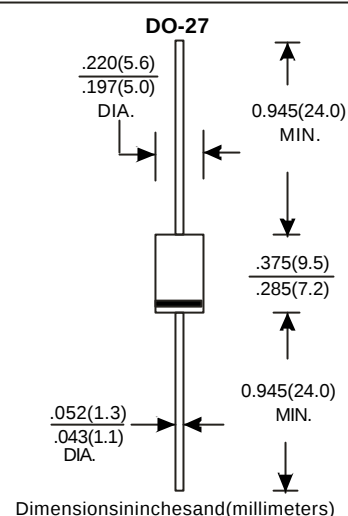
- *Case: Molded plastic
- *Epoxy: UL94V-0 rate flame retardant
- *Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- *Polarity: Color band denotes cathode end
- *Mounting position: Any
- *Weight: 1.10 grams

VOLTAGE RANGE

50 to 1000 Volts

CURRENT

3.0 Amperes



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%.

TYPENUMBER	UF5400	UF5401	UF5402	UF5404	UF5406	UF5407	UF5408	UNITS
MaximumRecurrentPeakReverseVoltage	50	100	200	400	600	800	1000	V
MaximumRMSVoltage	35	70	140	280	420	560	700	V
MaximumDCBlockingVoltage	50	100	200	400	600	800	1000	V
MaximumAverageForwardRectifiedCurrent .375"(9.5mm)LeadLengthatTa=50°C	3.0							A
PeakForwardSurgeCurrent,8.3mssinglehalfsine-wave superimposedonratedload(JEDECmethod)	200							A
MaximumInstantaneousForwardVoltageat3.0A	1.0			1.3	1.70			V
MaximumDCReverseCurrent Ta=25°C	5							µA
atRatedDCBlockingVoltage Ta=100°C	100							µA
MaximumReverseRecoveryTime(Note1)	50				75			rS
TypicalJunctionCapacitance(Note2)	75							pF
OperatingandStorageTemperatureRangeTi,TSTG	-65—+150							°C

NOTES:

1 Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A

2 Measured at 1MHz and applied reverse voltage of 4.0VDC.

RATING AND CHARACTERISTIC CURVES(UF5400THRUUF5408)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

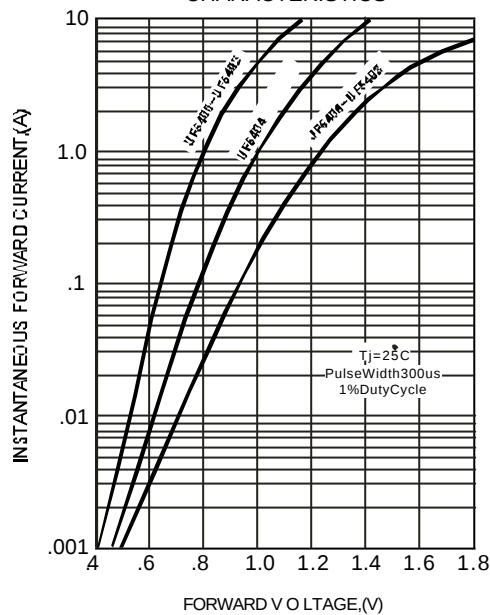


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

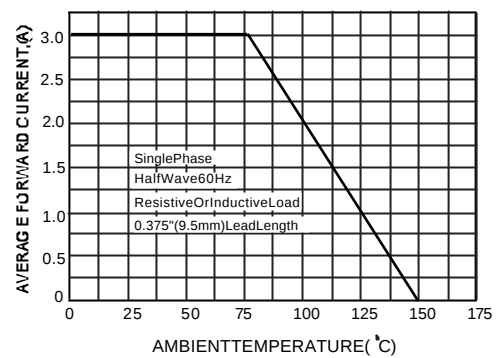


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

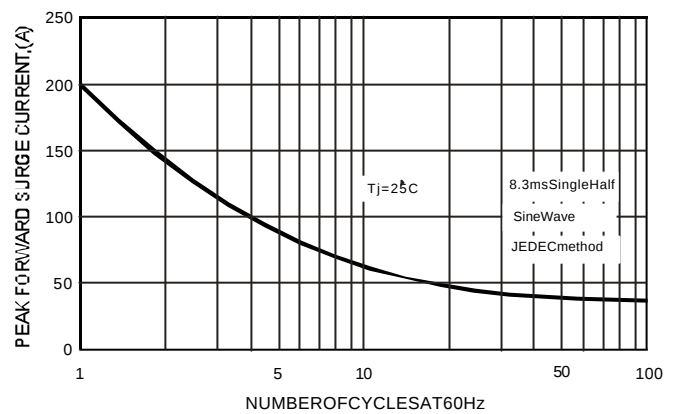


FIG.3-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS

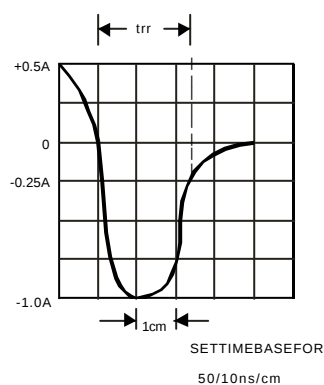
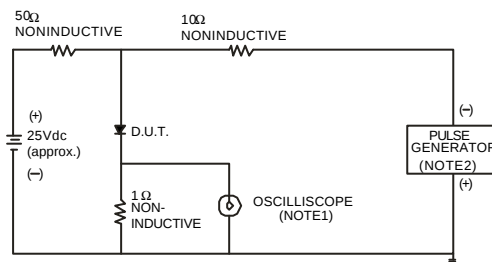


FIG.5-TYPICAL JUNCTION CAPACITANCE

