

1A03F THRU 1A18F



1.0 AMP FAST RECOVERY RECTIFIERS



FEATURES

- * Low forward voltage drop
- * Low leakage current
- * High reliability
- * High current capability

MECHANICAL DATA

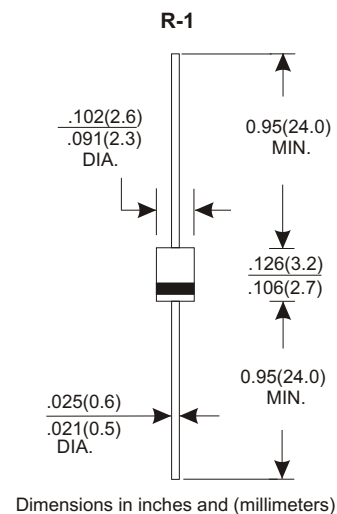
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Lead Free Finish/RoHS Compliant
- * Weight: 0.185 grams

VOLTAGE RANGE

200 to 1800 Volts

CURRENT

1.0 Ampere



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	1A03F	1A04F	1A05F	1A06F	1A07F	1A13F	1A16F	1A18F	UNITS
Maximum Recurrent Peak Reverse Voltage	200	400	600	800	1000	1300	1600	1800	V
Maximum RMS Voltage	140	280	420	560	700	910	1120	1260	V
Maximum DC Blocking Voltage	200	400	600	800	1000	1300	1600	1800	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Ta=75°C	1.0								A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	30								A
Maximum Instantaneous Forward Voltage at 1.0A	1.3				1.8				V
Maximum DC Reverse Current Ta=25°C	5.0								uA
at Rated DC Blocking Voltage Ta=100°C	100								uA
Maximum Reverse Recovery Time(Note 1)	150	250	300						ns
Typical Junction Capacitance (Note 2)	15								PF
Operating and Storage Temperature Range Tj, TSTG	-65 — +150								°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A.

RATING AND CHARACTERISTIC CURVES (1A03F THRU 1A18F)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

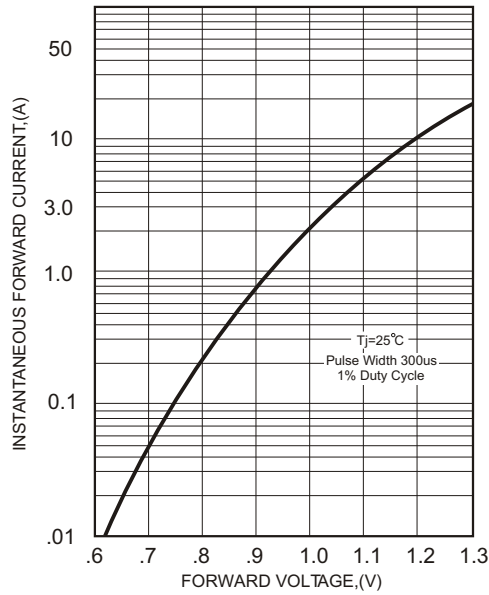


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

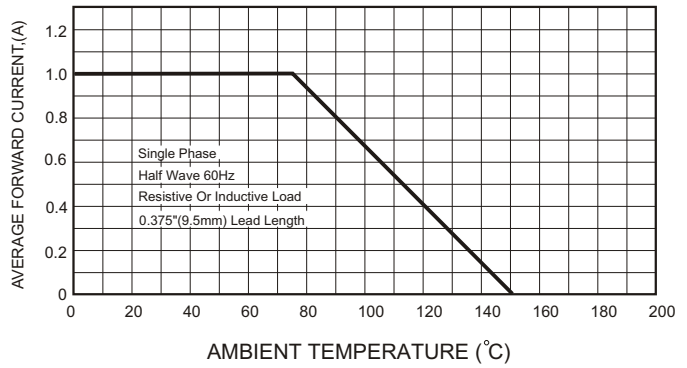


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

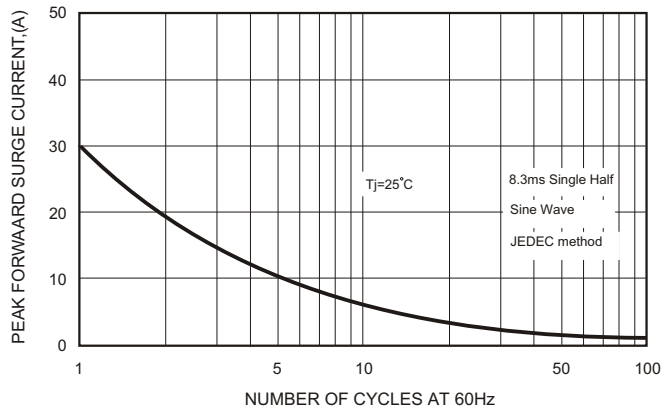


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

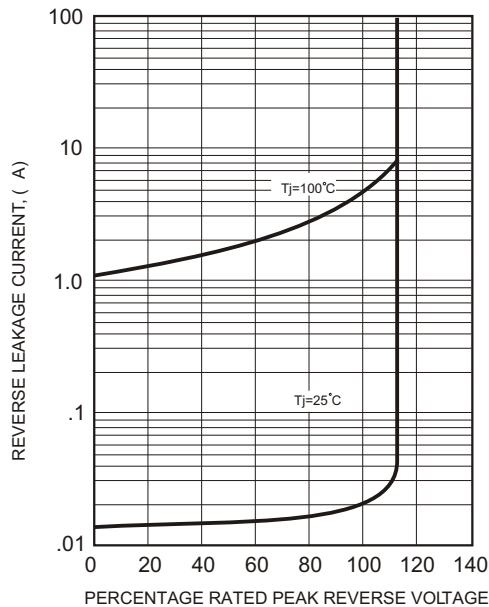


FIG.5-TYPICAL JUNCTION CAPACITANCE

