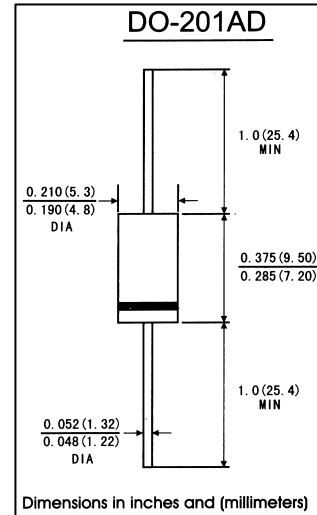


FEATURES

- . Fast switching
- . Low leakage
- . Low forward voltage drop
- . High current capability
- . High current surge
- . High reliability

MECHANICAL DATA

- . **Case:** JEDEC DO-201AD molded plastic body
- . **Terminals:** Plated axial leads,solderable per MIL-STD-750,method 2026
- . **Polarity:** Color band denotes cathode end
- . **Mounting Position:** Any
- . **Weight:** 0.041 ounce, 1.18 gram



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%)

	Symbols	FR301	FR302	FR303	FR304	FR305	FR306	FR307	Units
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	100	Volts
Macimum average forward rectified current 0.375"(9.5mm)lead length at TA=75°C	I(AV)	3.0							Amps
Peak forward surge current 8.3ms sing-wave superimposed on rated load (JEDEC method)	IFSM	200							Amps
Maximum instantaneous forward voltage at 3.0 A	VF	1.3							Volts
Maximum DC Rreverse Current at rated DC blocking voltage	TA=25°C	10							μ A
	TA=55°C	150							
Maximum reverse recovery time(Note 1)	Trr	150			250	500	ns		
Typical junction Capacitance(Note 2)	CJ	65							pF
Operating and storage temperature range	TJ TSTG	-65 to +150							°C

Notes: 1. Test conditions:IF=0.5A,IR=1.0A,Irr=0.25A.
2.Measured at 1MHz and applied reverse voltage of 4.0V Volts

RATINGS AND CHARACTERISTIC CURVES FR301 THRU FR307

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

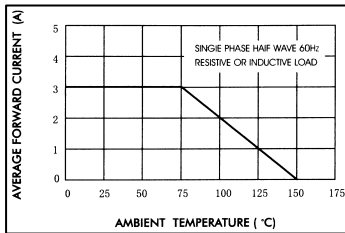


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

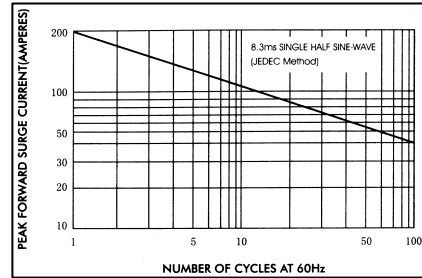


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

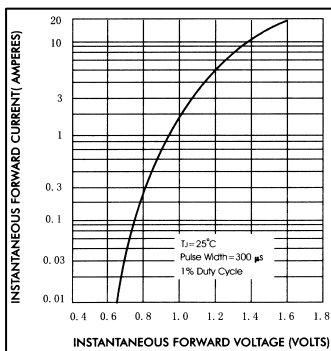


FIG.4-TYPICAL JUNCTION CAPACITANCE

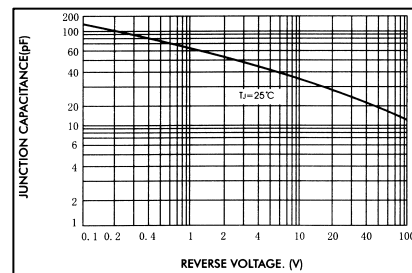


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

