

FEATURES:

- Low cost
- High surge current capability
- Low leakage current
- Low forward voltage drop
- Diffused junction

MECHANICAL DATA

Case : Molded plastic use UL 94V-0 recognized flame retardant epoxy

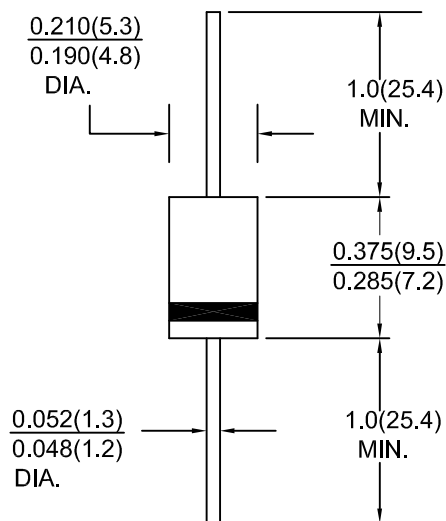
Terminals : Axial leads, solderable per MIL-STD-202 Method 208 guaranteed

Polarity : Color band on body denotes cathode

Mounting Position : Any

Weight : 1.1 grams, 0.039 ounce

DO-201AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temp. unless otherwise specified.

Single phase, half sine wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20 %.

Characteristic	Symbol	FR 301	FR 302	FR 303	FR 304	FR 305	FR 306	FR 307	Units	
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts	
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	Volts	
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	Volts	
Maximum average forward rectified current at Ta=55° C	I _O	3.0							Amps	
Peak forward surge current ,8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I _{FSM}	150.0							Amps	
Maximum instantaneous forward voltage drop at 3.0 A	V _F	1.30							Volts	
Maximum DC reverse current at rated DC blocking voltage	I _R	5.0 30.0							μ A	
Typical reverse recovery time (note 1)	trr	150	150	150	150	250	500	500	nS	
Typical junction capacitance (note 2)	C _j	60							pF	
Operating junction and storage temperature range	T _j , T _{stg}	-65 to +125				-65 to +150				° C

NOTES:1. Reverse recovery 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 DC

RATINGS AND CHARACTERISTIC CURVES FR301 THRU FR307

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

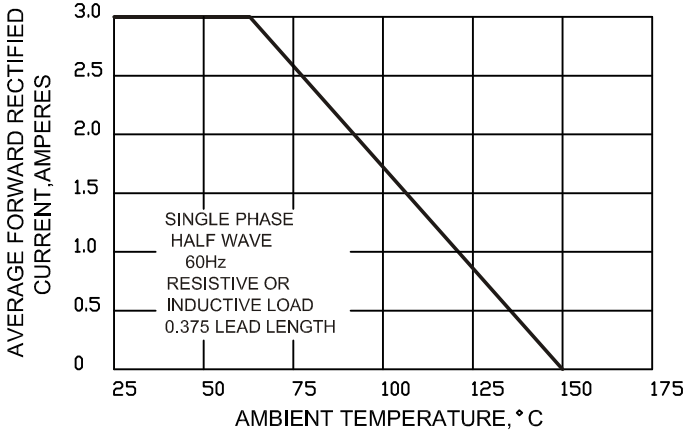


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

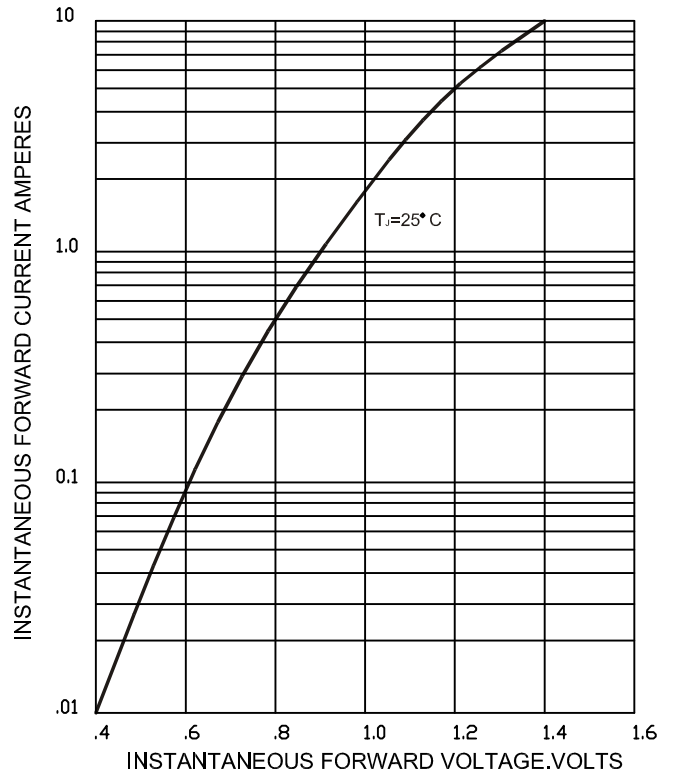


FIG.3-TYPICAL JUNCTION CAPACITANCE

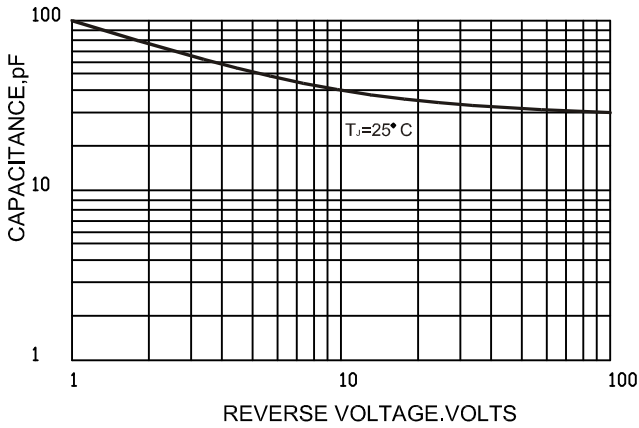


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

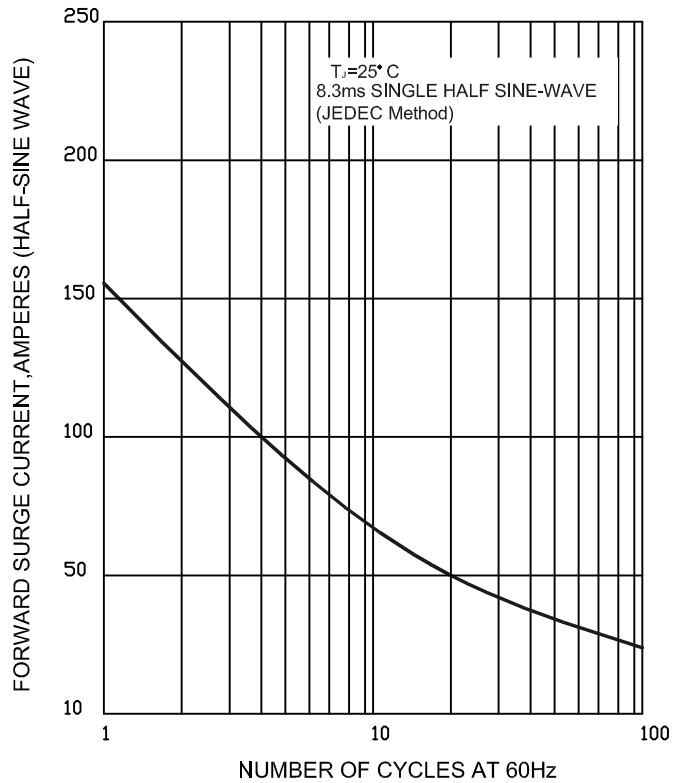


FIG.5-REVERSE RECOVERY TIME CHARACTERISTICS

