



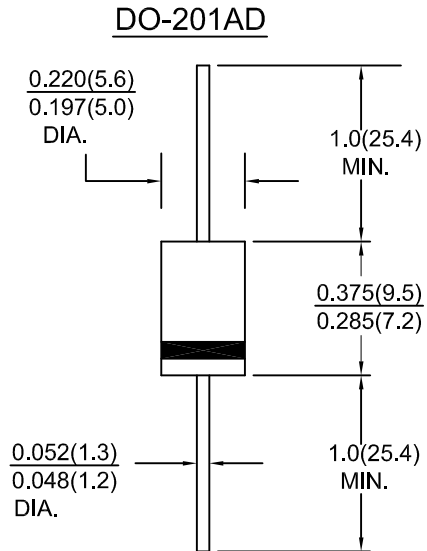
SUPER FAST RECOVERY SILICON RECTIFIERS

FEATURES:

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Good for switching mode application
- Open junction

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
 Weight : 1.10 grams



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	SF 31	SF 32	SF 33	SF 34	SF 35	SF 36	SF 37	Units	
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	150	200	300	400	600	Volts	
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	420	Volts	
Maximum DC blocking voltage	V _{DC}	50	100	150	200	300	400	600	Volts	
Maximum average forward rectified current .375"(9.5mm) lead length at Ta=55°C	I _(AV)	3.0							Amps	
Peak forward surge current ,8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I _{FSM}	125							Amps	
Maximum instantaneous forward voltage at 3.0 A	V _F	1.00			1.30		1.70		Volts	
Maximum instantaneous reverse current at rated DC blocking voltage	I _R	5.0			100					μ A
Maximum reverse recovery time (note 1)	trr	35							nS	
Typical junction capacitance (note 2)	C _j	50							pF	
Operating and storage temperature range	T _j , T _{stg}	-65 to +150							°C	

Notes : 1. Reverse recovery test condition : I_F=0.5A ; I_R=1.0A ; I_{RR}=0.25A
 2. Measured 1MHz and applied reverse voltage of 4.0V DC



RATINGS AND CHARACTERISTIC CURVES

FIG.1-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

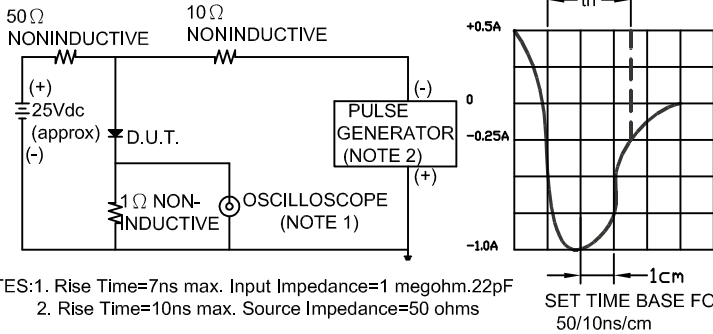


FIG.2 - TYPICAL FORWARD CURRENT DERATING CURVE

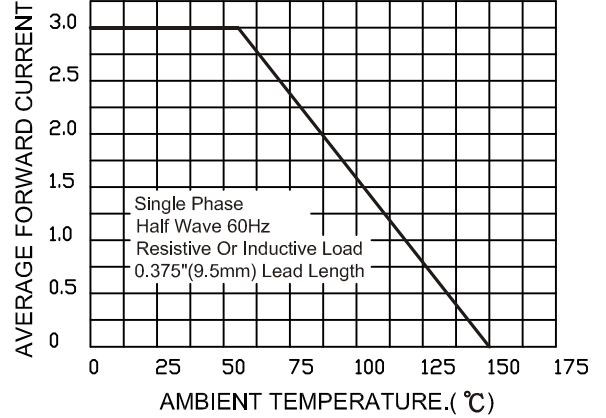


FIG.3-TYPICAL FORWARD CHARACTERISTICS

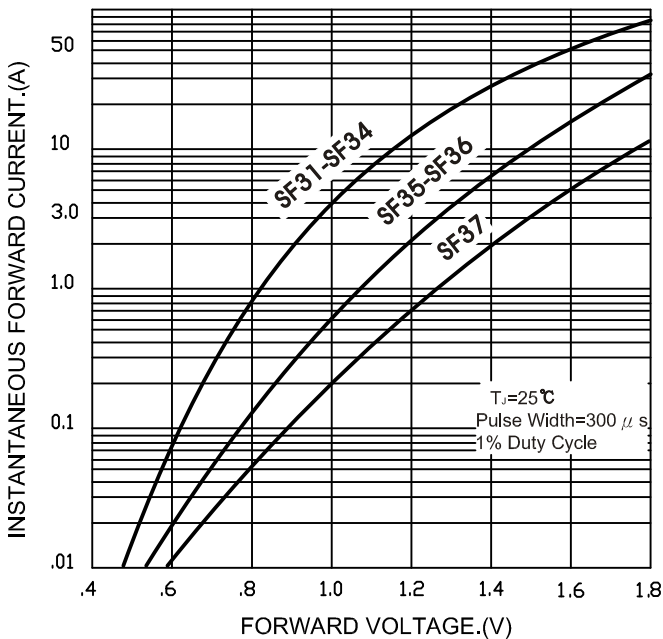


FIG.4-TYPICAL REVERSE CHARACTERISTICS

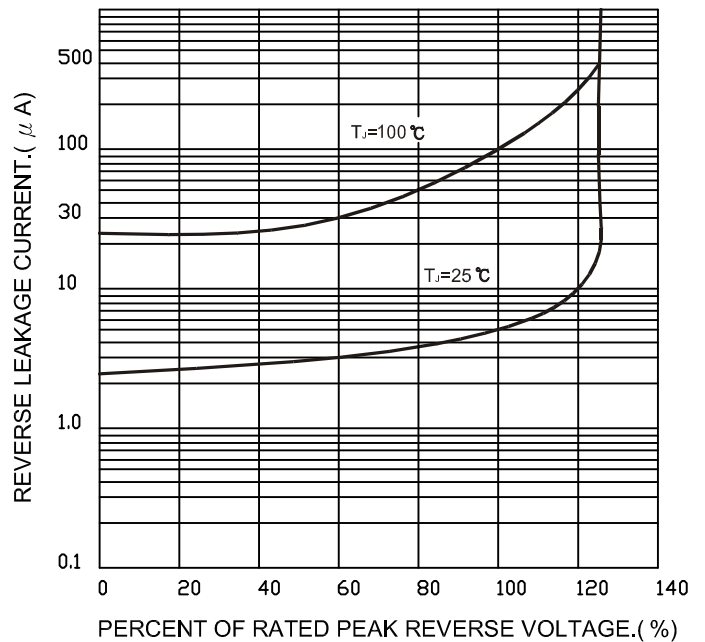


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

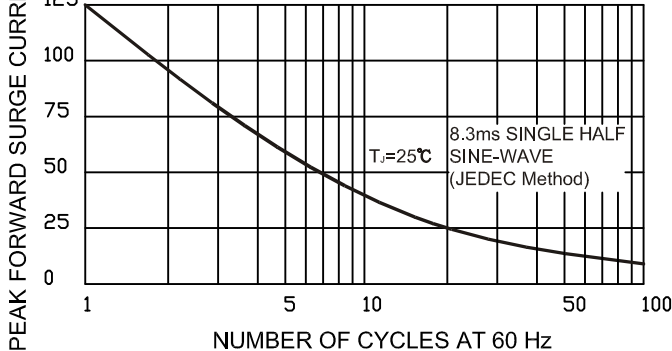
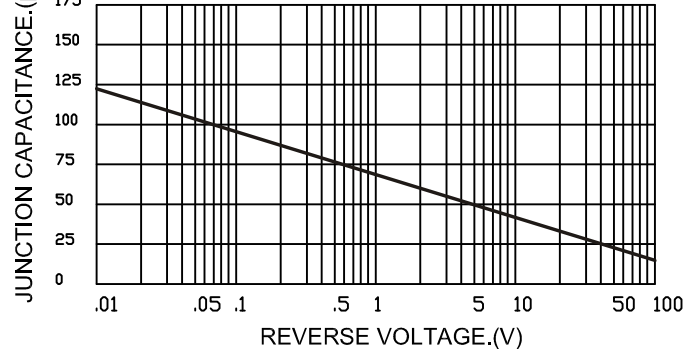


FIG.6-TYPICAL JUNCTION CAPACITANCE





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