



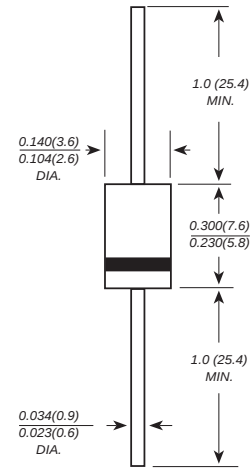
DO-15

**Features**

- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ High reliability
- ◆ High surge current capability

Mechanical Data

- ◆ Case: Molded plastic DO-204AC (DO-15)
- ◆ Epoxy: UL 94V-O rate flame retardant
- ◆ Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- ◆ Polarity: Color band denotes cathode end
- ◆ High temperature soldering guaranteed:
250°C/10 seconds .375" (9.5mm) lead
lengths at 5 lbs., (2.3kg) tension
- ◆ Mounting position: Any
- ◆ Weight: 0.014 ounce, 0.395 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%

Dimensions in inches and (millimeters)

Parameter	Symbols	SF21G	SF22G	SF23G	SF24G	SF25G	SF26G	SF28G	SF29G	Units	
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	150	200	300	400	600	800	Volt	
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	420	560	Volts	
Maximum DC blocking voltage	V _{DC}	50	100	150	200	300	400	600	800	Volts	
Maximum average forward rectified current .375" (9.5mm) lead length @T _A =55°C	I _(AV)	2.0								Amps	
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	50.0								Amps	
Maximum instantaneous forward voltage @ 2.0A	V _F	0.95				1.3		1.7		Volt s	
Maximum DC reverse current @ T _A =25°C at rated DC blocking voltage @ T _A =125°C	I _R	5.0 100								uA uA	
Maximum reverse recovery time (Note 1)	t _{rr}	35								nS	
Typical junction capacitance (Note 2)	C _J	60				30				pF	
Operating junction temperature range	T _J	-55 to +150								°C	
Storage temperature range	T _{STG}	-55 to +150								°C	

- Notes:**
1. Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$
 2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

Ratings And Characteristic Curves

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

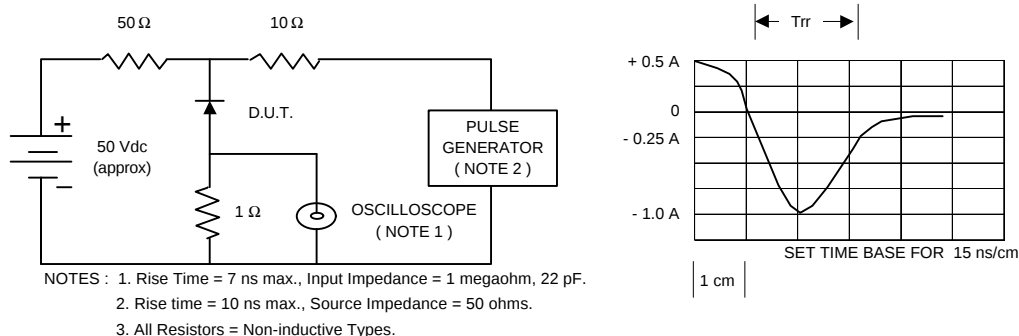


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

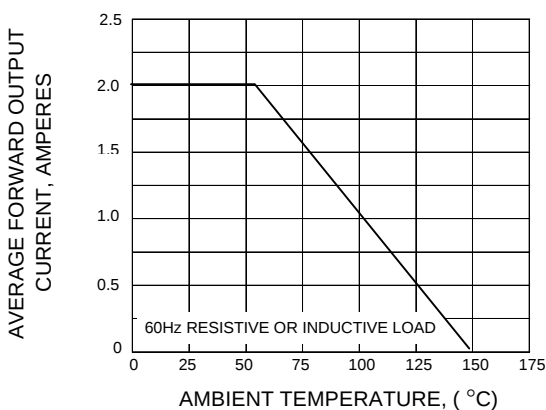


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

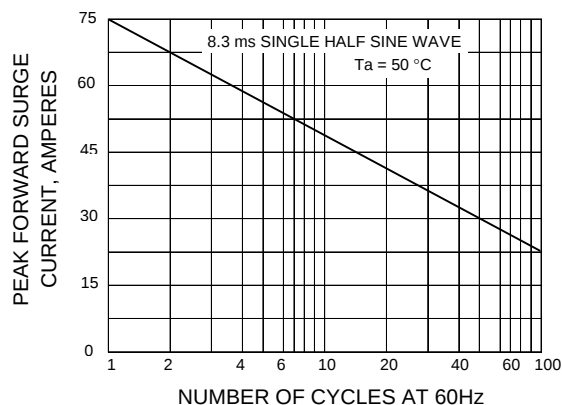


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

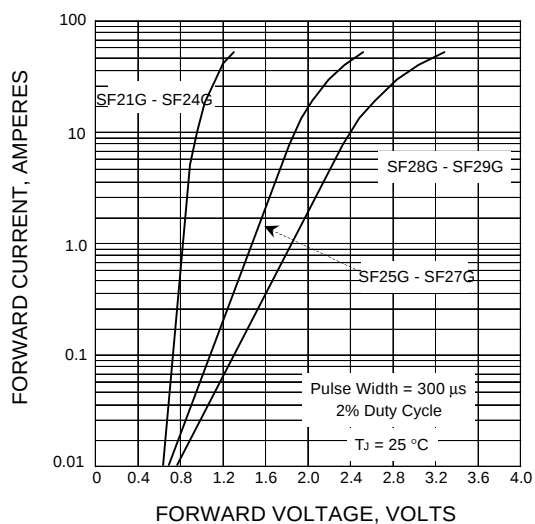


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

