

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Fast Switching
- Low Leakage
- High Current Capability
- High Surge Capability
- High Reliability

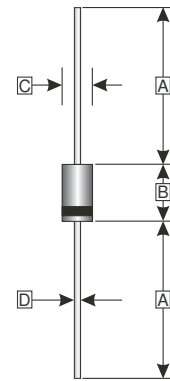
MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: Device has UL Flammability Classification 94V-0
- Lead: MIL-STD-202E Method 208C Guaranteed
- Mounting Position: Any

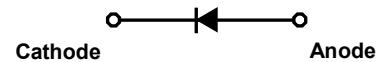
ORDER INFORMATION

Part Number	Type
R1800FG	Lead (Pb)-free
R1800FG-C	Lead (Pb)-free and Halogen-free

DO-41



REF.	Millimeter	
	Min.	Max.
A	25.4 (TYP)	
B	4.10	5.21
C	2.00	2.72
D	0.70	0.90



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameters	Symbol	Ratings	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1800	V
Maximum RMS Voltage	V_{RMS}	1260	V
Maximum DC Blocking Voltage	V_{DC}	1800	V
Maximum Average Forward Rectified Current @ $T_A=50^\circ\text{C}$	$I_{F(AV)}$	500	mA
Peak Forward Surge Current, @8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30	A
Maximum Instantaneous Forward Voltage @0.5A DC	V_F	2.5	V
Maximum DC Reverse Current @Rated DC Blocking Voltage	I_R	5	μA
Maximum Reverse Recovery Time ¹	t_{rr}	500	nS
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55~150	°C

Note:

1. Test Conditions: $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{RR}=0.25\text{A}$

RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

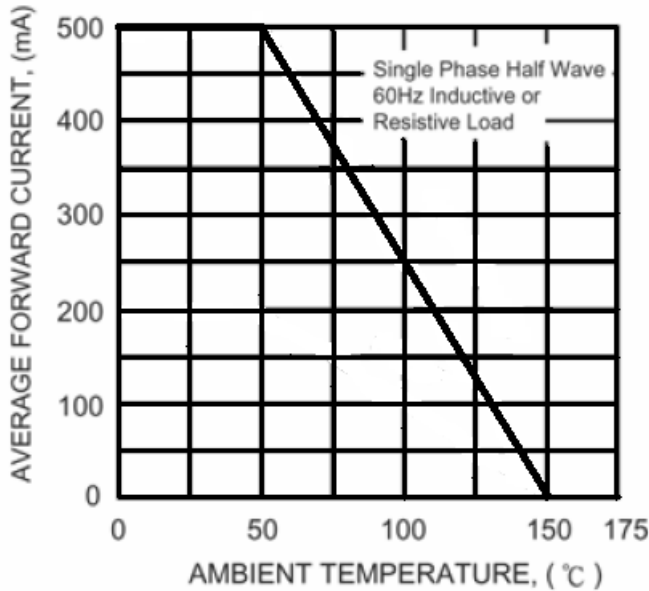


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

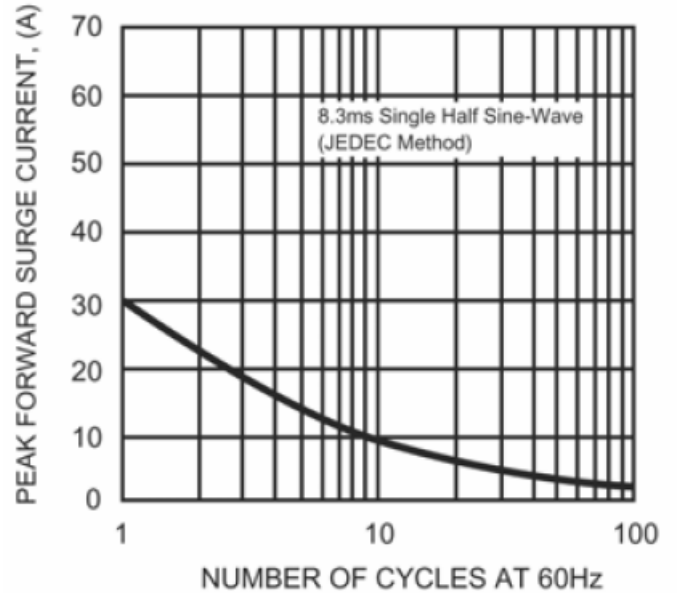
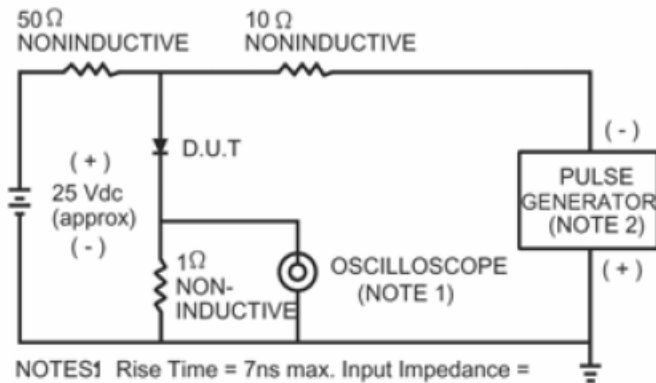


FIG. 3 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



- NOTES1 Rise Time = 7ns max. Input Impedance = 1 megohm. 22 pF.
2. Rise Time = 10ns max. Source Impedance = 50 ohms.

