

15DF4 ~ 15DF8

PRV : 400 - 800 Volts
Io : 1.3 Amperes

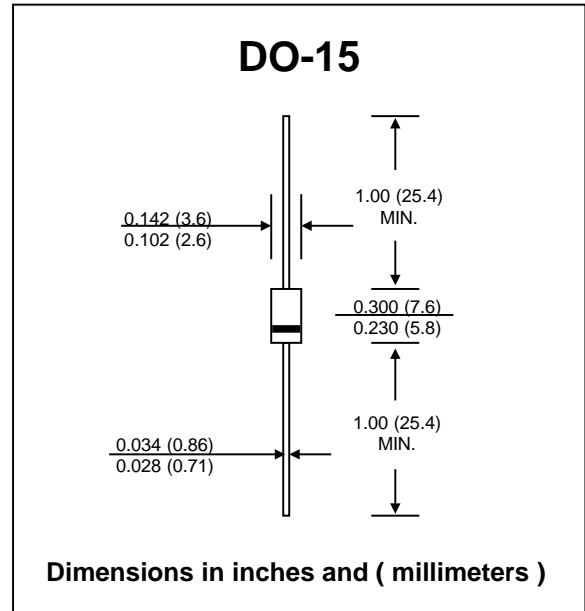
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Fast switching for high efficiency
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : DO-15 Molded plastic
- * Epoxy : UL94V-0 rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.4 gram

FAST RECOVERY DIODES



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

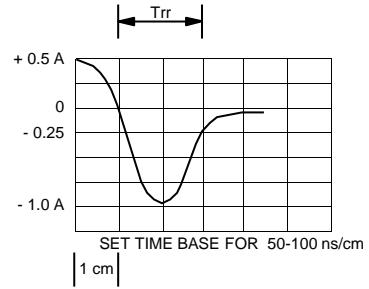
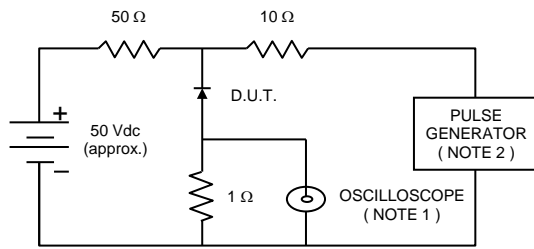
RATING	SYMBOL	15DF4	15DF6	15DF8	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	400	600	800	V
Maximum RMS Voltage	VRMS	280	420	560	V
Maximum DC Blocking Voltage	VDC	400	600	800	V
Maximum Average Forward Current Ta = 40°C	IF(AV)	1.3			A
Maximum Peak Forward Surge Current, 8.3ms Single half sine wave	IFSM	70			A
Maximum Peak Forward Voltage at IF = 1.3 A	VF	1.2			V
Maximum DC Reverse Current at Rated DC Blocking Voltage	IRM	10			µA
Maximum Reverse Recovery Time (Note 1)	Trr	150			ns
Junction Temperature Range	TJ	- 65 to + 150			°C
Storage Temperature Range	TSTG	- 65 to + 150			°C

Note :

(1) Reverse Recovery Test Conditions : IF = 0.5 A, IR = 1.0 A, Irr = 0.25 A.

RATING AND CHARACTERISTIC CURVES (15DF4 ~ 15DF8)

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



NOTES : 1. Rise Time = 7 ns max., Input Impedance = 1 megaohm, 22 pF.
2. Rise time = 10 ns max., Source Impedance = 50 ohms.
3. All Resistors = Non-inductive Types.

FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

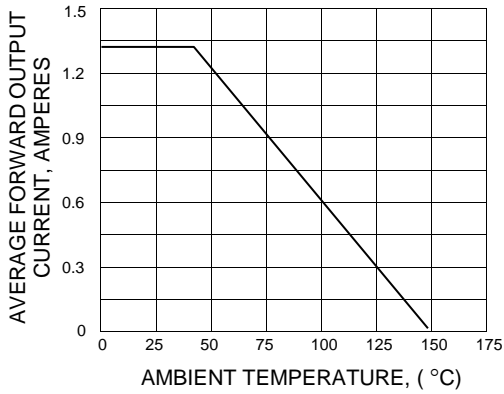


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

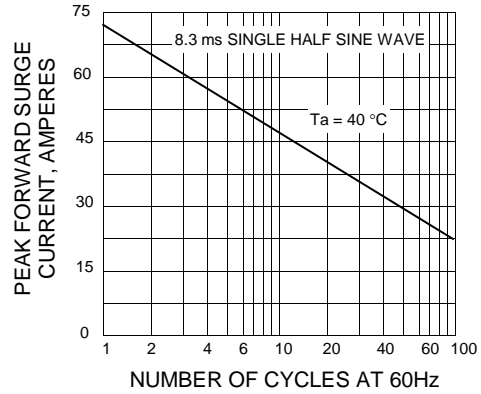


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

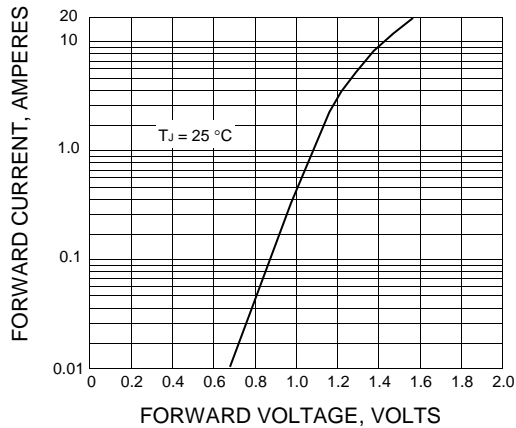


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

