

ALL RIGHTS RESERVED. NO PORTION OF THIS PUBLICATION, WHETHER IN WHOLE OR IN PART CAN BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF SPC TECHNOLOGY.

SPC-F005.DWG

REVISIONS			DOC. NO. SPC-F005 * Effective: 7/8/02 * DCP No: 1398					
DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
			VEE	10-08-10	JAG	11-08-10	XXX	24-08-10



Features:

1. Flammability: UL94V-0 utilizing flame retardant epoxy molding compound
2. Void-free plastic in DO-41 package
3. 1.0 ampere operation at T_a = 55°C with no thermal runaway.
4. Exceeds environmental standards of MIL-S-19500/228

Mechanical Data:

1. Case: Molded Plastic, DO-41
2. Terminals: Axial leads, solderable per MIL-STD-202 method 208
3. Polarity: Band denotes cathode
4. Mounting Position: Any
5. Weight 0.013 ounce, 0.3 gram

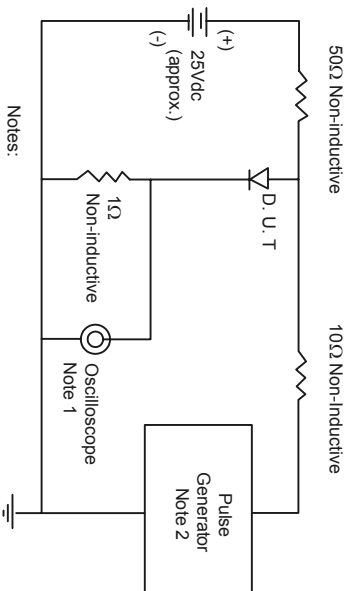
Maximum Ratings and Electrical Characteristics:

(Rating at 25°C ambient temperature unless otherwise specified Single phase, half wave, 60 Hz, resistive or inductive load.)

1. Peak Reverse Voltage, Repetitive: V_{rev}: 800V
2. Maximum RMS Voltage: 560 V
3. DC Blocking Voltage: VR: 800V
4. Average Forward Current, I_a at T_a = 55°C
3.8" lead length, 60 Hz resistive or inductive load: 1.0 A
5. Peak Forward Surge Current I_{av} (surge) 8.3msec single half sine-wave superimposed on rated load (JEDEC method): 30.0 A
6. Maximum Forward Voltage V_f at 1.0A, 25°C: 1.70 V
7. Maximum Forward Current:
at Rated T_a = 25°C: 10.0 μA
at Reverse Voltage T_r = 100°C: 500 μA
8. Typical Junction Capacitance (Note 1) C_J: 17.0 μF
9. Typical Junction Resistance (Note 2) R_{θJA}: 60.0°C/W
10. Reverse Recovery Time (I_r = 0.5A, I_a = 1A, I_r = 0.25A): 75ns
11. Operating and Storage Temperature Range: -55°C to +150°C

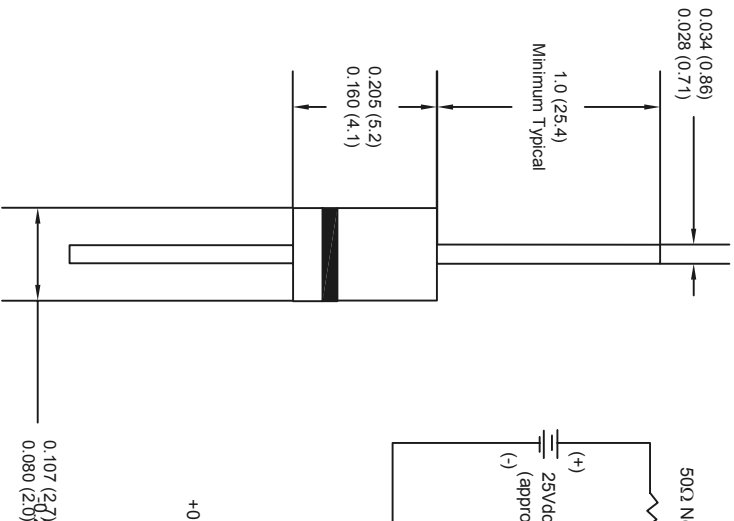
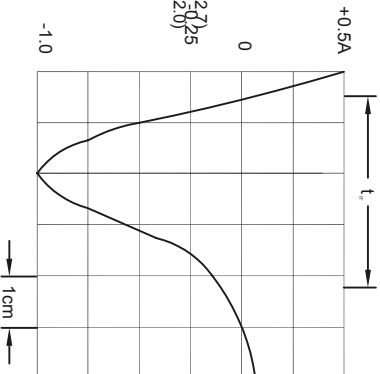
Notes:

1. Measured at 1 MHz and applied reverses voltage of 4.0 VDC
2. Thermal resistance from junction to ambient and from junction to lead length 0.375" (9.5mm) P.C Board mounted.



Notes:

1. Rise Time = 7ns max.
Input Impedance = 1 Megohm, 22dF
2. Rise Time = 10ns max.
Source Impedance = 50 Ohms.



Set Time Base for 50ns/cm

DISCLAIMER:

ALL STATEMENTS AND TECHNICAL INFORMATION CONTAINED HEREIN ARE BASED UPON INFORMATION AND/OR TESTS WE BELIEVE TO BE ACCURATE AND RELIABLE. SINCE CONDITIONS OF USE ARE BEYOND OUR CONTROL, THE USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR THE INTENDED USE AND ASSUME ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THEREWITH.

TOLERANCES:

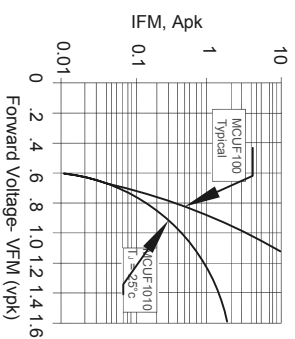
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:		DATE:		DRAWING TITLE:							
VEE		10-08-10		Ultrafast Switching Rectifier, 1.0 Ampere							
CHECKED BY:		DATE:		SIZE		DWG. NO.		ELECTRONIC FILE		REV	
JAG		11-08-10		A		XXX		XXX.DWG		A	
APPROVED BY:		DATE:		SCALE:		NTS		U.O.M.: Millimeters		SHEET: 1 OF 1	
XXX		24-08-10									

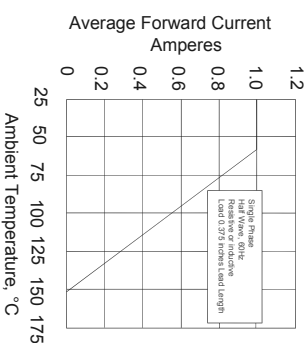
ALL RIGHTS RESERVED. NO PORTION OF THIS PUBLICATION, WHETHER IN WHOLE OR IN PART CAN BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF SPC TECHNOLOGY.

SPC-F005.DWG

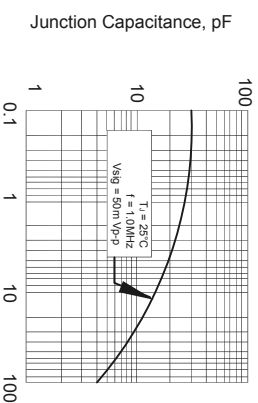
REVISIONS				DOC. NO.	SPC-F005	Effective: 7/8/02		DCP No: 1398
DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
			VEE	10-08-10	JAG	11-08-10	XXX	24-08-10



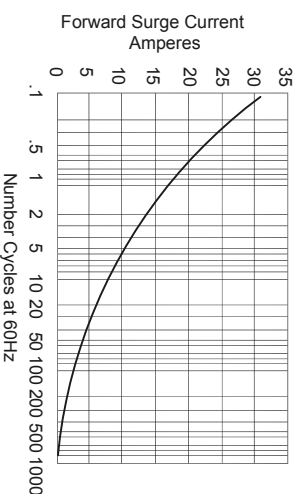
Forward Current Derating Curve



Forward Current Derating Curve



Typical Junction Capacitance



Peak Forward Surge Current

Part Number Table

Description	Part Number
Ultrafast Switching Rectifier, 1.0 Ampere	UF108-RH

DISCLAIMER:

ALL STATEMENTS AND TECHNICAL INFORMATION CONTAINED HEREIN ARE BASED UPON INFORMATION AND/OR TESTS WE BELIEVE TO BE ACCURATE AND RELIABLE. SINCE CONDITIONS OF USE ARE BEYOND OUR CONTROL, THE USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR THE INTENDED USE AND ASSUME ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THEREWITH.

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	DATE:	DRAWING TITLE:	
VEE	10-08-10	Ultrafast Switching Rectifier, 1.0 Ampere	
CHECKED BY:	DATE:	SIZE	DWG. NO.
JAG	11-08-10	A	XXX
APPROVED BY:	DATE:	SCALE:	NTS
XXX	24-08-10	U.O.M.: Millimeters	SHEET: 1 OF 1