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SPC-F005.DWG

REVISIONS

DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
			VEE	10-08-10	Jogon	14-08-10	XXX	24-08-10

DOC. NO. SPC-F005 * Effective: 7/8/02 * DCP No: 1398



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 $T_j = 55^\circ\text{C}$ 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

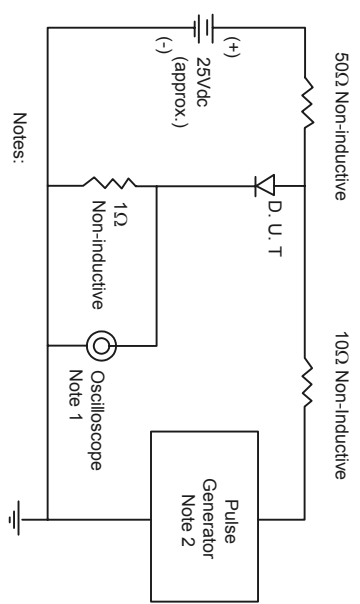
Maximum Ratings and Electrical Characteristics:

(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_{rrm} : 200V
2. Maximum RMS Voltage: 140 V
3. DC Blocking Voltage: VR: 200V
4. Average Forward Current, I_A at $T_j = 55^\circ\text{C}$
3.8" lead length, 60 Hz resistive or inductive load: 1.0 A
5. Peak Forward Surge Current I_{FSM} (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 : 1.00 V
7. Maximum Forward Current:
at Rated $T_j = 25^\circ\text{C}$: 10.0 μA
at Reverse Voltage $T_j = 100^\circ\text{C}$: 500 μA
8. Typical Junction Capacitance (Note 1) CJ: 17.0 pF
9. Typical Junction Resistance (Note 2) R θ JA: 60.0 $^\circ\text{C}/\text{W}$
10. Reverse Recovery Time ($t_r = 0.5A$, $I_A = 1A$, $I_r = 0.25A$): 50ns
11. Operating and Storage Temperature Range: -55°C to $+150^\circ\text{C}$

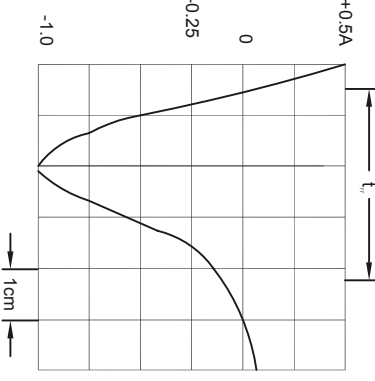
Notes:

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.



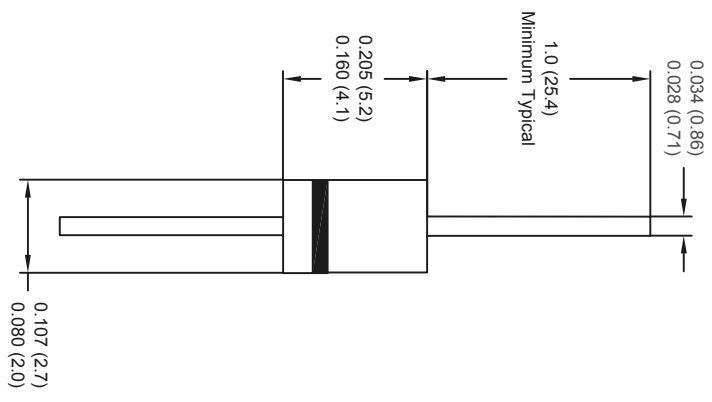
Notes:

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

Dimensions : Inches (mm)



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.

DRAWING TITLE:

Ultrafast Switching Rectifier, 1.0 Ampere

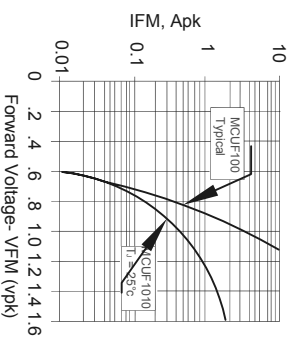
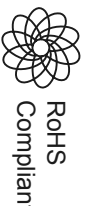
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VEE	10-08-10	A	XXX	XXX.DWG	A
CHECKED BY:	DATE:	SCALE:	NTS	U.O.M.: Millimeters	SHEET: 1 OF 1
Jogon	14-08-10				
APPROVED BY:	DATE:				
XXX	24-03-10				



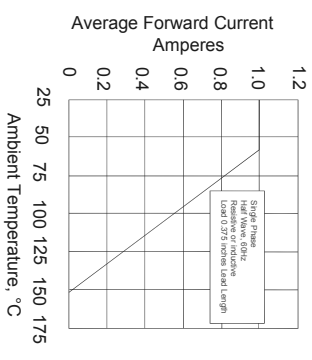
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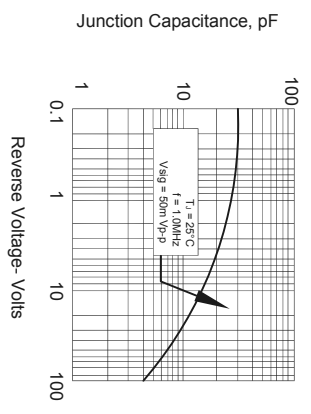
REVISIONS		DCP NO.	SPC-F005	* Effective:	7/8/02	* DCP No.:	1398	
DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
			VEE	10-08-10	JAG	11-03-10	XXX	24-08-10



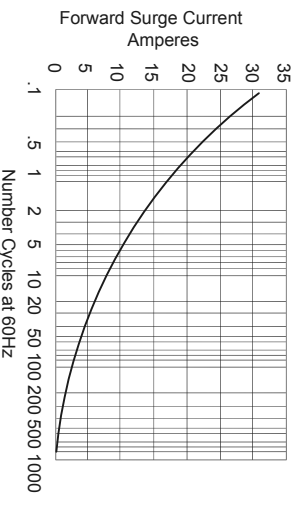
Forward Current Derating Curve



Forward Current Derating Curve



Typical Junction Capacitance



Peak Forward Surge Current

Part Number Table

Description	Part Number
Ultrafast Switching Rectifier, 1.0 Ampere	UF102-RH

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DRAWN BY:	DATE:
VEE	10-08-10
CHECKED BY:	DATE:
JAG	11-08-10
APPROVED BY:	DATE:
XXX	24-08-10

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Ultrafast Switching Rectifier, 1.0 Ampere		XXX.DWG	
SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	XXX	XXX.DWG	A
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