

TECHNICAL DATA
DATASHEET 4242, Rev A

HERMETIC ULTRAFAST DIODE

Description: 1Amp, 15nS diode in hermetic package

Applications / Markets:

- Switch-mode power supply
- Datacommunication and telecommunication system equipment
- Hi-rel industry
- Military
- Aerospace

Features / benefits:

- Ultrafast Soft Recovery
- Low Forward Voltage Drop
- High Efficiency Switching
- High Surge Capacity
- Available In Leaded And Surface Mount Packaging
- Upscreen to JANTX, JANTXV and JANS per Mil-Prf-19500 available
- All Package Styles Are Hermetic, Non-Cavity
- Metallurgical bond

Maximum ratings $T_A=+25^{\circ}\text{C}$ unless otherwise specified

Types	PIV V(pk)	Io		Ir @ PIV μA		I_{FSM} Tp=1/120 s	Vf		Tr (3)	$R_{\theta JEC}$ L=0 $^{\circ}\text{C}/\text{W}$	$Z_{\theta JX}$ $^{\circ}\text{C}/\text{W}$	T_{STG}, T_J $^{\circ}\text{C}$
		Io ₁ (1) Amps	Io ₂ (2)	25 $^{\circ}\text{C}$	100 $^{\circ}\text{C}$		V	A				
SXX175UF-A	175	2.5	1.0	1.0	50	35	1.1	2.5	15	20	4.5	-65 to 175
SXX200UF-A	200	2.5	1.0	1.0	50	35	1.1	2.5	15	20	4.5	-65 to 175
SXX225UF-A	225	2.5	1.0	1.0	50	35	1.1	2.5	15	20	4.5	-65 to 175
SXX250UF-A	250	2.5	1.0	1.0	50	35	1.1	2.5	15	20	4.5	-65 to 175

XX = package style: AL: Axial Lead; SM: Surface Mount

(1) $T_L=75^{\circ}\text{C}$ L=.375in. for axial lead package; $T_{EC}=T_L$ at L=0 for surface mount package

(2) $T_A=55^{\circ}\text{C}$. This rating is typical for boards where thermal resistance from mounting point to ambient is sufficiently controlled where $T_{J(MAX)}$ is not exceeded.

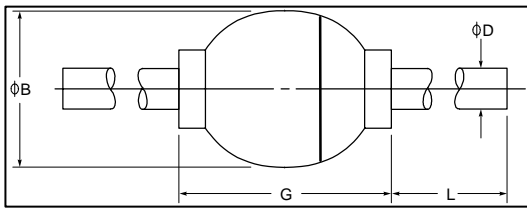
(3)Reverse recovery time conditions: $I_f=0.5\text{A}$ $I_r=1.0\text{A}$ $I_{rr}=0.25\text{A}$

SENSITRON

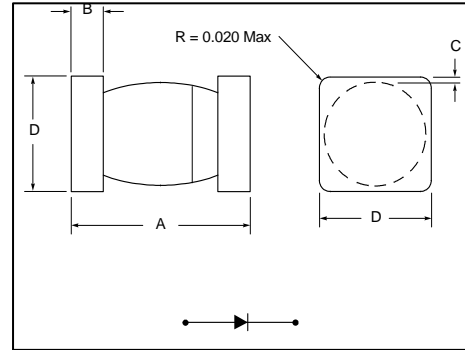
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Package Information

Axial Lead



Surface Mount



PACKAGE STYLE	DIMENSIONS - INCHES (MILLIMETERS)			
	ϕB	ϕD	G	L
106	.065/.085 1.65/2.16	.027/.032 .69/.81	.125/.250 3.18/6.35	.700/1.30 17.8/33.0

PACKAGE STYLE	DIMENSIONS - INCHES (MILLIMETERS)			
	A	B	C	D
MELF-A	.168/.205 4.27/5.21	.019/.028 .48/.72	.003 Min .076 Min	.091/.103 2.3/2.6

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