

SENSITRON **SEMICONDUCTOR**

TECHNICAL DATA DATASHEET 4242, Rev-

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

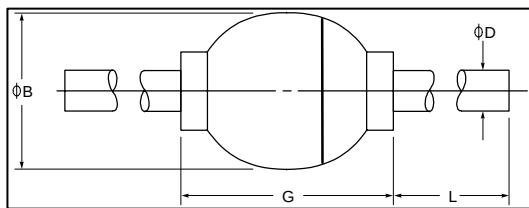
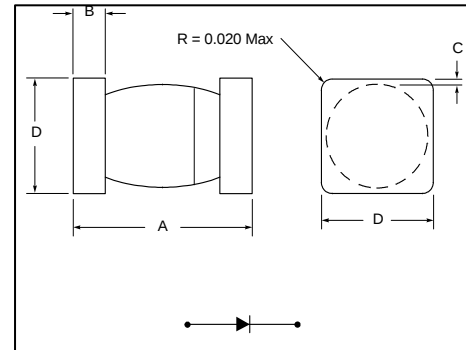
Types	PIV	Io		Ir @ PIV μA		I _{FSM} Tp=1/120 s	Vf		T _{rr} (3)	R _{θJEC} L=0	Z _{θJX}	T _{STG} , T _J
	V(pk)	Amps										
		Io ₁ (1)	Io ₂ (2)	25 °C	100°C	A(pk)	V	A	nS	°C/W	°C/W	°C
SXX175UF-A	175	2.5	1.0	1.0	50	35	1.1	2.5	15	20	4.5	-65 to 175
SXX200UF-A	200	2.5	1.0	1.0	50	35	1.1	2.5	15	20	4.5	-65 to 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 $T_{J(\text{MAX})}$ is not exceeded.

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

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Package Information**Axial Lead****Surface Mount**

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

PACKAGE STYLE	DIMENSIONS - INCHES (MILLIMETERS)			
	A	B	C	D
MELF-A	.168/.205	.019/.028	.003 Min	.091/.103
	4.27/5.21	.48/.72	.076 Min	3.48/3.76

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