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°C unless otherwise specified

Types	PIV	Io		Ir @ PIV		I_{FSM}	V	f	Trr	$R_{\theta JEC}$	$Z_{ heta JX}$	T_{STG}, T_{J}
				μΑ		Tp=1/120			(3)	L=0		
	V(pk)	Amps				S						
		$Io_1(1)$	$Io_2(2)$	25 °C	100°C	A(pk)	V	Α	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 °C L=.375in. for axial lead package; T_{EC} = T_L at L=0 for surface mount package

 $(2)T_A=55$ °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 =0.5A I_r =1.0A I_{rr} =0.25A

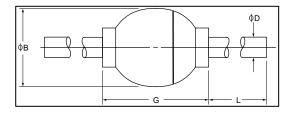
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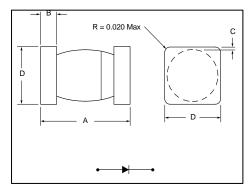
TECHNICAL DATA DATASHEET 4242, Rev-

Package Information

Axial Lead



Surface Mount



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

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

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