

TECHNICAL DATA
DATASHEET 4196, REV. –

**HERMETIC, HIGH VOLTAGE,
ULTRAFAST RECOVERY RECTIFIERS**
AXIAL / MELF

Applications:

- High performance voltage doublers • High voltage DC to DC converters / SMPS

Features:

- Ultrafast Recovery At Low And High Temperature
- Low Forward Voltage Drop
- High Efficiency Switching Enables High Frequency Voltage Multiplier Designs
- High Surge Capacity
- Available In Leaded And Surface Mount Packaging
- All Package Styles Are Hermetic

MAXIMUM RATINGS

All ratings are at $T_A = 25^\circ\text{C}$ unless otherwise specified.

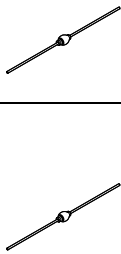
CHARACTERISTICS	SYMBOL	PART/PACKAGE TYPE	MAX	UNITS
Reverse Recovery Time	T_{rr} NOTE 1	HE, UF	70, 100	nsec
Thermal Resistance	$R_{\theta JC}$	107, 307	50, 21.5	$^\circ\text{C}/\text{W}$
Thermal Resistance	$R_{\theta JC}$	Melf-C, Melf-D	18, 10	$^\circ\text{C}/\text{W}$
Operating and Storage Temperature	T_{op} & T_{stg}	--	-65 to +175	$^\circ\text{C}$

Note 1: T_{rr} test method with drawing if applicable.

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
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ELECTRICAL CHARACTERISTICS

TYPE NUMBER	PEAK INVERSE VOLTAGE	MAX AVG. DC OUTPUT CURRENT		MAXIMUM REVERSE CURRENT @ PIV		MAX. PEAK FORWARD VOLTAGE (PULSED)		PEAK 1 CYCLE SURGE CURRENT	MAX. REVERSE RECOVERY TIME NOTE 1 HE/UF	THERM. RES. R _{θJX} d=.250"	PACKAGE STYLE
		Amps		μAmps		V	A				
		Volts	55°C	100°C	25°C	100°C					
SRM1150HE/UF	1500	.50	.250	.50	20	3.0	.50	25	70/100	50	
SRM1200HE/UF	2000	.50	.250	.50	20	3.0	.50	25	70/100	50	
SRM1250HE/UF	2500	.25	.125	.50	20	5.0	.25	15	70/100	50	
SRM1300HE/UF	3000	.25	.125	.50	20	5.0	.25	15	70/100	50	
SRM1400HE/UF	4000	.15	.075	.50	20	7.0	.15	10	70/100	50	
SRM1500HE/UF	5000	.15	.075	.50	20	7.0	.15	10	70/100	50	
SRM1600HE/UF	6000	.10	.050	.50	20	9.0	.10	5	70/100	50	
SRM3150HE/UF	1500	1.5	.750	1.0	25	4.0	1.5	60	70/100	21.5	
SRM3200HE/UF	2000	1.5	.750	1.0	25	4.0	1.5	60	70/100	21.5	
SRM3250HE/UF	2500	.75	.375	1.0	25	6.0	.75	40	70/100	21.5	
SRM3300HE/UF	3000	.75	.375	1.0	25	6.0	.75	40	70/100	21.5	
SRM3400HE/UF	4000	.50	.250	1.0	25	9.0	.50	25	70/100	21.5	
SRM3500HE/UF	5000	.50	.250	1.0	25	9.0	.50	25	70/100	21.5	307
SRM3600HE/UF	6000	.25	.125	1.0	25	10.5	.25	15	70/100	21.5	

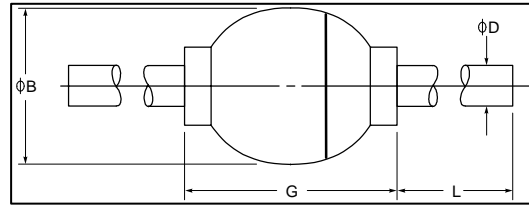
Note 1: Trr test method with drawing if applicable.

ELECTRICAL CHARACTERISTICS (MELFs)

TYPE NUMBER	PEAK INVERSE VOLTAGE	MAX AVG. DC OUTPUT CURRENT		MAXIMUM REVERSE CURRENT @ PIV		MAX. PEAK FORWARD VOLTAGE (PULSED)		PEAK 1 CYCLE SURGE CURRENT	MAX REVERSE RECOVERY TIME NOTE 1 HE/UF	THERM. RES. R _{θJX} °C/W	PACKAGE STYLE
		Amps		μAmps		V	A				
		Volts	55°C	100°C	25°C	100°C					
SRM1150HEU/UFU	1500	.50	.250	.50	20	3.0	.50	25	70/100	18	
SRM1200 HEU/UFU	2000	.50	.250	.50	20	3.0	.50	25	70/100	18	
SRM1250HEU/UFU	2500	.25	.125	.50	20	5.0	.25	15	70/100	18	
SRM1300HEU/UFU	3000	.25	.125	.50	20	5.0	.25	15	70/100	18	
SRM1400HEU/UFU	4000	.15	.075	.50	20	7.0	.15	10	70/100	18	
SRM1500HEU/UFU	5000	.15	.075	.50	20	7.0	.15	10	70/100	18	
SRM1600HEU/UFU	6000	.10	.050	.50	20	9.0	.10	5.0	70/100	18	
SRM3150HEU/UFU	1500	1.5	.750	1.0	25	4.0	1.5	60	70/100	10	
SRM3200HEU/UFU	2000	1.5	.750	1.0	25	4.0	1.5	60	70/100	10	
SRM3250HEU/UFU	2500	.75	.375	1.0	25	6.0	.75	40	70/100	10	
SRM3300HEU/UFU	3000	.75	.375	1.0	25	6.0	.75	40	70/100	10	
SRM3400HEU/UFU	4000	.50	.250	1.0	25	9.0	.50	25	70/100	10	
SRM3500HEU/UFU	5000	.50	.250	1.0	25	9.0	.50	25	70/100	10	MELF-D
SRM3600HEU/UFU	6000	.25	.125	1.0	25	10.5	.25	15	70/100	10	

Note 1: Trr test method with drawing if applicable.

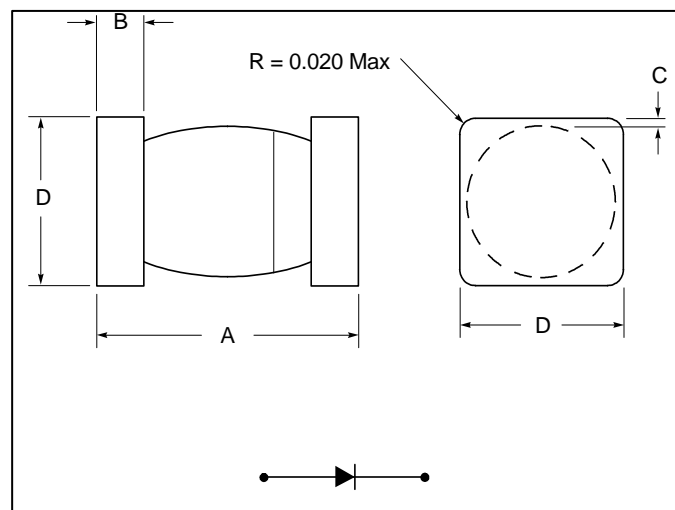
MECHANICAL DIMENSIONS (Axial) In Inches / (mm), min./max.



PACKAGE STYLE	AXIAL DIMENSIONS - INCHES / MILLIMETERS			
	ϕB	ϕD	G	L
107	.115/.180	.026/.033	.130/.300	.90/1.30
	2.92/4.57	.66/.84	3.30/7.62	22.9/33.0
307	.115/.180	.037/.042	.130/.300	.90/1.30
	2.92/4.57	.94/1.07	3.30/7.62	22.9/33.0

Note: Cathode side of device is indicated by a dark band marked on body.

MECHANICAL DIMENSIONS (Melf) In Inches / (mm), min./max.



PACKAGE STYLE	MELF DIMENSIONS - INCHES / MILLIMETERS			
	A	B	C	D
MELF-C	.168/.300	.019/.028	.003 Min	.091/.128
	4.27/7.62	.48/.72	.076 Min	2.31/3.21
MELF-D	.168/.300	.019/.028	.003 Min	.137/.148
	4.27/7.62	.48/.72	.076 Min	3.48/3.76

Note: Cathode side of device is indicated by a dark band marked on body.

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