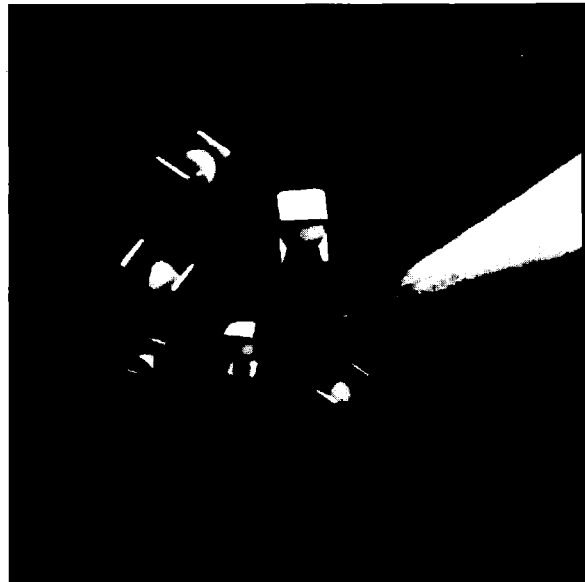


TECHNICAL DATA
DATASHEET 136 REVISION—

HERMETIC SURFACE MOUNT RECTIFIERS (MELF PACKAGE)

FEATURES

- HERMETIC PACKAGE.
- SMALL SIZE.
- JANTX/TXV QUALIFIED
- GENERAL PURPOSE/
FAST RECOVERY/ULTRAFAST.
- THERMALLY EFFICIENT.



Sensitrons Melf Style Rectifiers are surface mount equivalents to our Axial Lead Rectifiers. The Melf Package offers improved thermal performance and reduced size versus their Axial Lead counterparts.

The Melf components are fully hermetic, and are qualified to MIL-S-19500 JANTXV levels.



HERMETIC SURFACE MOUNT RECTIFIERS (MELFS)

GENERAL PURPOSE ($T_{rr} \leq 2000$ nsec)

TYPE NUMBER	PEAK INVERSE VOLTAGE	MAXIMUM AVERAGE DC OUTPUT CURRENT		PEAK SINGLE CYCLE SURGE (8.3 mS)	MAXIMUM FORWARD VOLTAGE (PULSED)		MAXIMUM REVERSE CURRENT AT PIV		MAXIMUM REVERSE RECOVERY TIME ②	THERMAL RESISTANCE ③	PACKAGE STYLE
		AMPS			VOLTS	AMPS	25°C	100°C			
	VOLTS	Ta = 55°C	Tec = 100°C ①	AMPS					n sec	°C/W	
1N5614US	200	1.0	4.0	50	1.3	3.0	0.5	25	2000	10	MELF-1
1N5616US	400	1.0	4.0	50	1.3	3.0	0.5	25	2000	10	
1N5618US	600	1.0	4.0	50	1.3	3.0	0.5	25	2000	10	
1N5620US	800	1.0	4.0	50	1.3	3.0	0.5	25	2000	10	
1N5622US	1000	1.0	4.0	50	1.3	3.0	0.5	25	2000	10	
1N5550US	200	3.0	6.0	150	1.2	9.0	1.0	75	2000	8	MELF-B
1N5551US	400	3.0	6.0	150	1.2	9.0	1.0	75	2000	8	
1N5552US	600	3.0	6.0	150	1.2	9.0	1.0	75	2000	8	
1N5553US	800	3.0	6.0	150	1.3	9.0	1.0	75	2000	8	
1N5554US	1000	3.0	6.0	150	1.3	9.0	1.0	75	2000	8	

FAST RECOVERY (150 nsec $\leq T_{rr} \leq 500$ nsec)

1N5615US	200	1.0	3.0	25	1.6	3.0	0.5	25	150	10	MELF-1
1N5617US	400	1.0	3.0	25	1.6	3.0	0.5	25	150	10	
1N5619US	600	1.0	3.0	25	1.6	3.0	0.5	25	250	10	
1N5621US	800	1.0	3.0	25	1.6	3.0	0.5	25	250	10	
1N5623US	1000	1.0	3.0	25	1.6	3.0	0.5	25	500	10	
1N5415US	50	3.0	6.0	80	1.5	9.0	1.0	20	150	8	MELF-B
1N5416US	100	3.0	6.0	80	1.5	9.0	1.0	20	150	8	
1N5417US	200	3.0	6.0	80	1.5	9.0	1.0	20	150	8	
1N5418US	400	3.0	6.0	80	1.5	9.0	1.0	20	150	8	
1N5419US	500	3.0	6.0	80	1.5	9.0	1.0	20	250	8	
1N5420US	600	3.0	6.0	80	1.5	9.0	1.0	20	450	8	

SUPER FAST RECOVERY (25 nsec $\leq T_{rr} \leq 70$ nsec)

1N5807US	50	3.0	8.0	125	.925	6	5.0	150	30	8	MELF-B
1N5809US	100	3.0	8.0	125	.925	6	5.0	150	30	8	
1N5811US	150	3.0	8.0	125	.925	6	5.0	150	30	8	
1N6626US	200	2.0	6.0	75	1.35	2.0	2.0	500④	30	8	MELF-B
1N6627US	400	2.0	6.0	75	1.35	2.0	2.0	500	30	8	
1N6628US	600	2.0	6.0	75	1.35	2.0	2.0	500	30	8	
1N6629US	800	1.4	5.0	75	1.40	1.4	2.0	500	50	8	
1N6630US	900	1.4	5.0	75	1.40	1.4	2.0	500	50	8	
1N6631US	1000	1.4	5.0	60	1.60	1.4	4.0	1000	60	8	
SSM340S3	400	3.0	6.0	70	1.25	3.0	20	100	30	8	MELF-B
SSM160HE	600										MELF-1
SSM180HE	800	.75	2.0	20	1.7	.75	5.0	50	60	10	
SSM1100HE	1000										

- ① Tec = Endcap temperature. Encaps have to be heat sunk sufficiently to remove dissipated power in order to achieve this rated current.
- ② Trr conditions; If = 0.5A, Ir = 1.0A, Irr = 0.25A.
- ③ Maximum thermal resistance, junction to encaps.

- ④ TA = 150°C
- All ratings are at Ta = 25°C unless otherwise specified.
- Maximum operating and storage temperature range -65°C to +175°C.

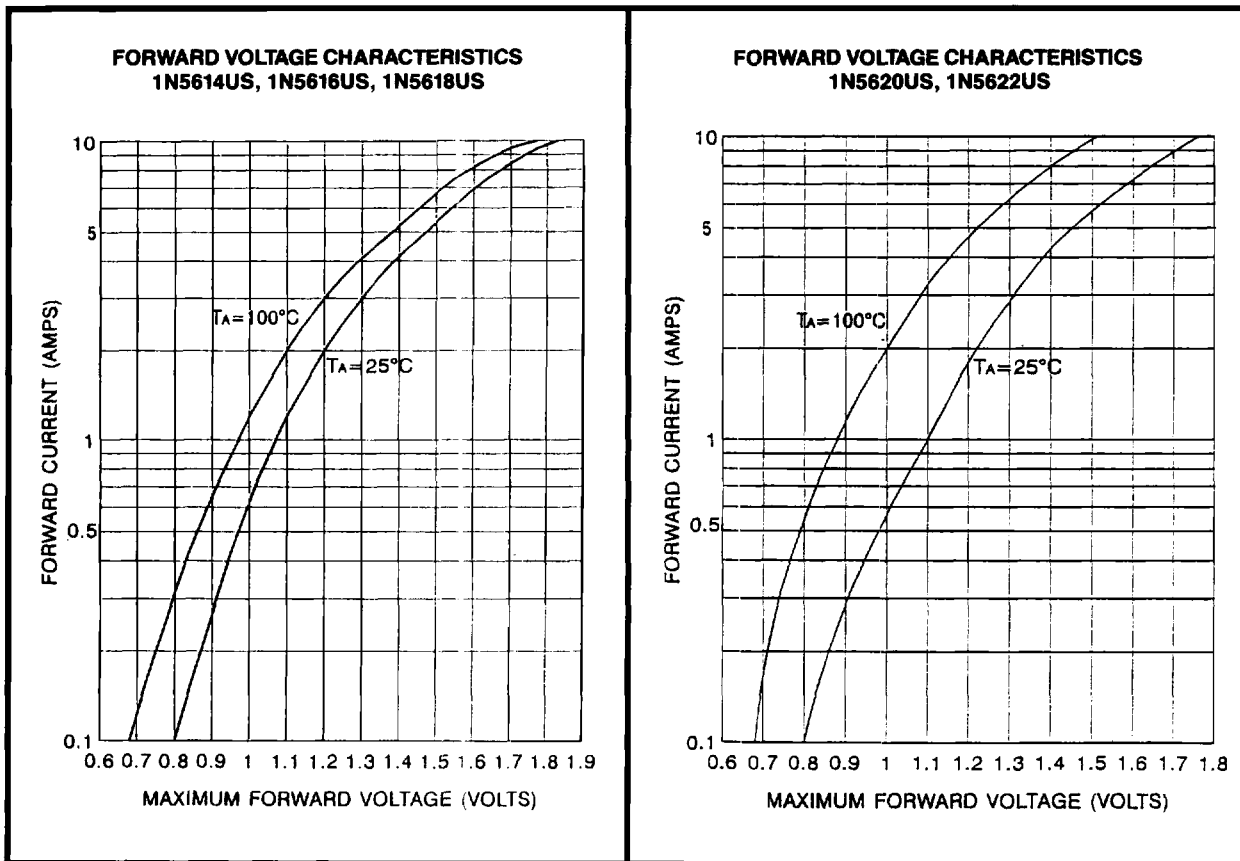
MECHANICAL DIMENSIONS

MELF PACKAGES REV.—

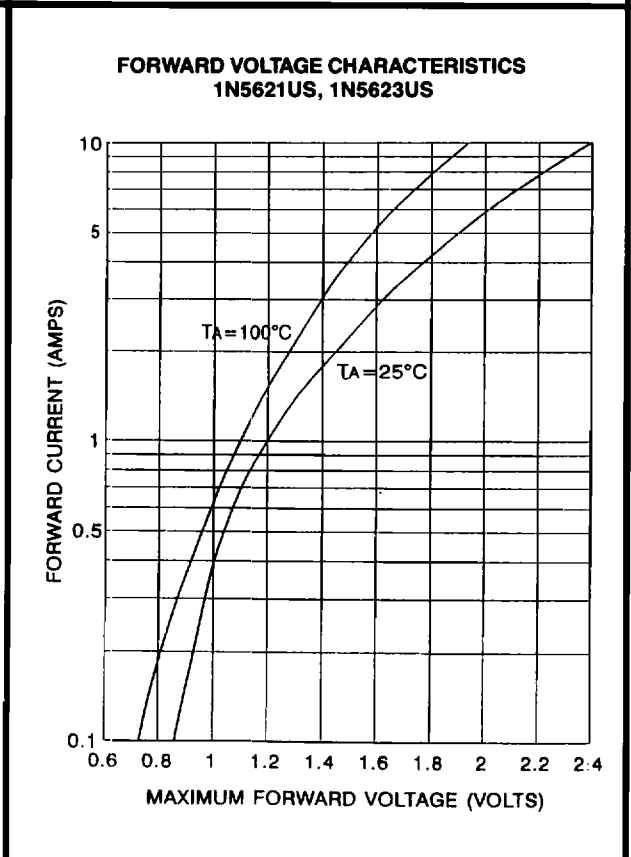
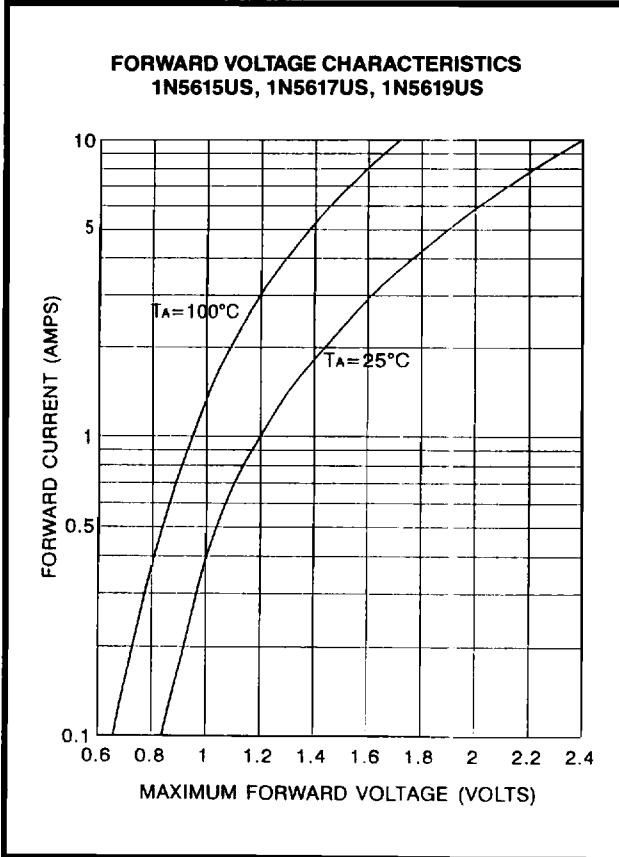
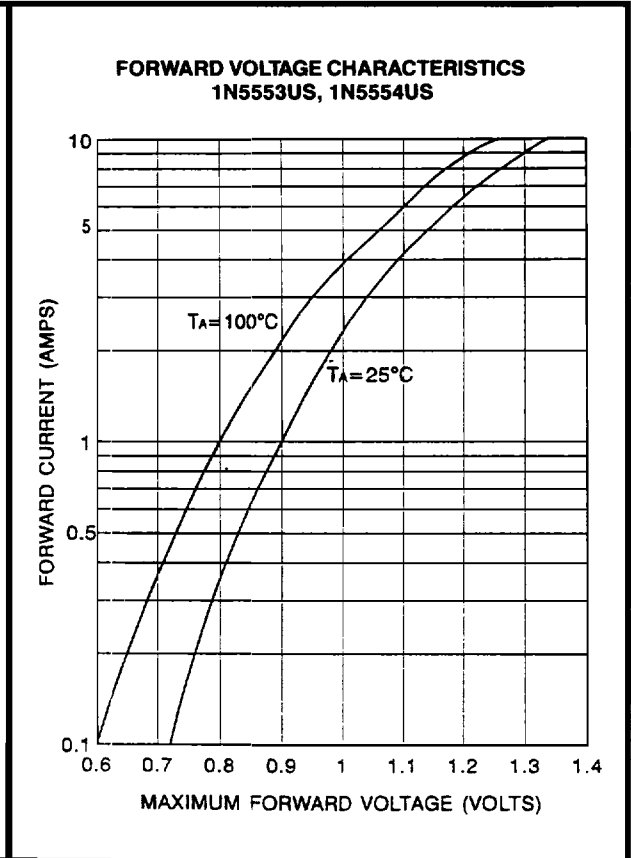
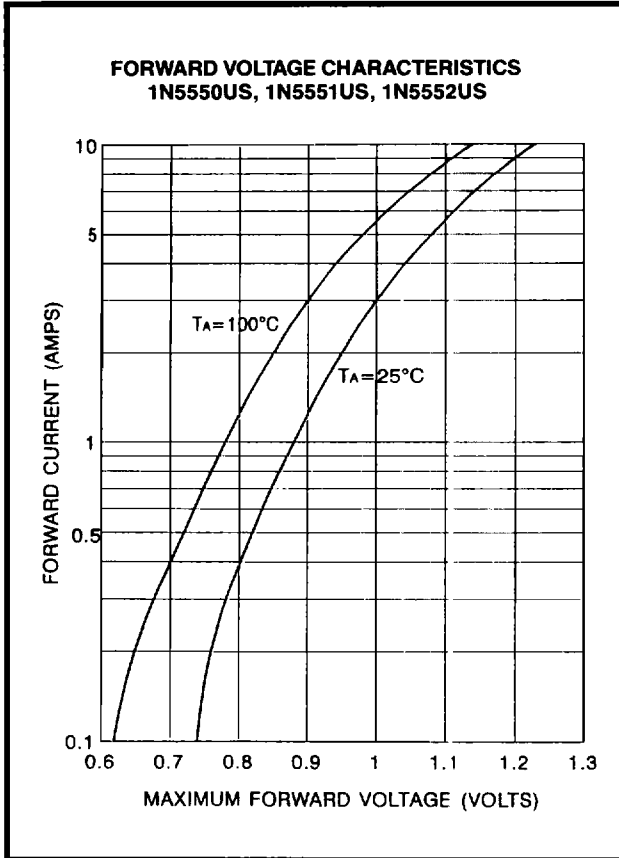
PACKAGE STYLE	DIMENSIONS - INCHES (MM)			
	A	B	C	D
MELF-A	.168/.200 (4.2/5.1)	0.19/.028 (.48/.72)	.003 MIN (.076)	.091/.103 (2.3/3.3)
MELF-B	.200/.225 (5.0/5.8)	0.19/.028 (.48/.72)	.003 MIN (.076)	.137/.148 (3.4/3.8)
MELF-1	.168/.230 (4.2/5.9)	0.19/.028 (.48/.72)	.003 MIN (.076)	.091/.128 (3.4/3.8)

- Encap material copper
- Finish hot solder dipped.
- Cathode indicated by dark colored band on light body.

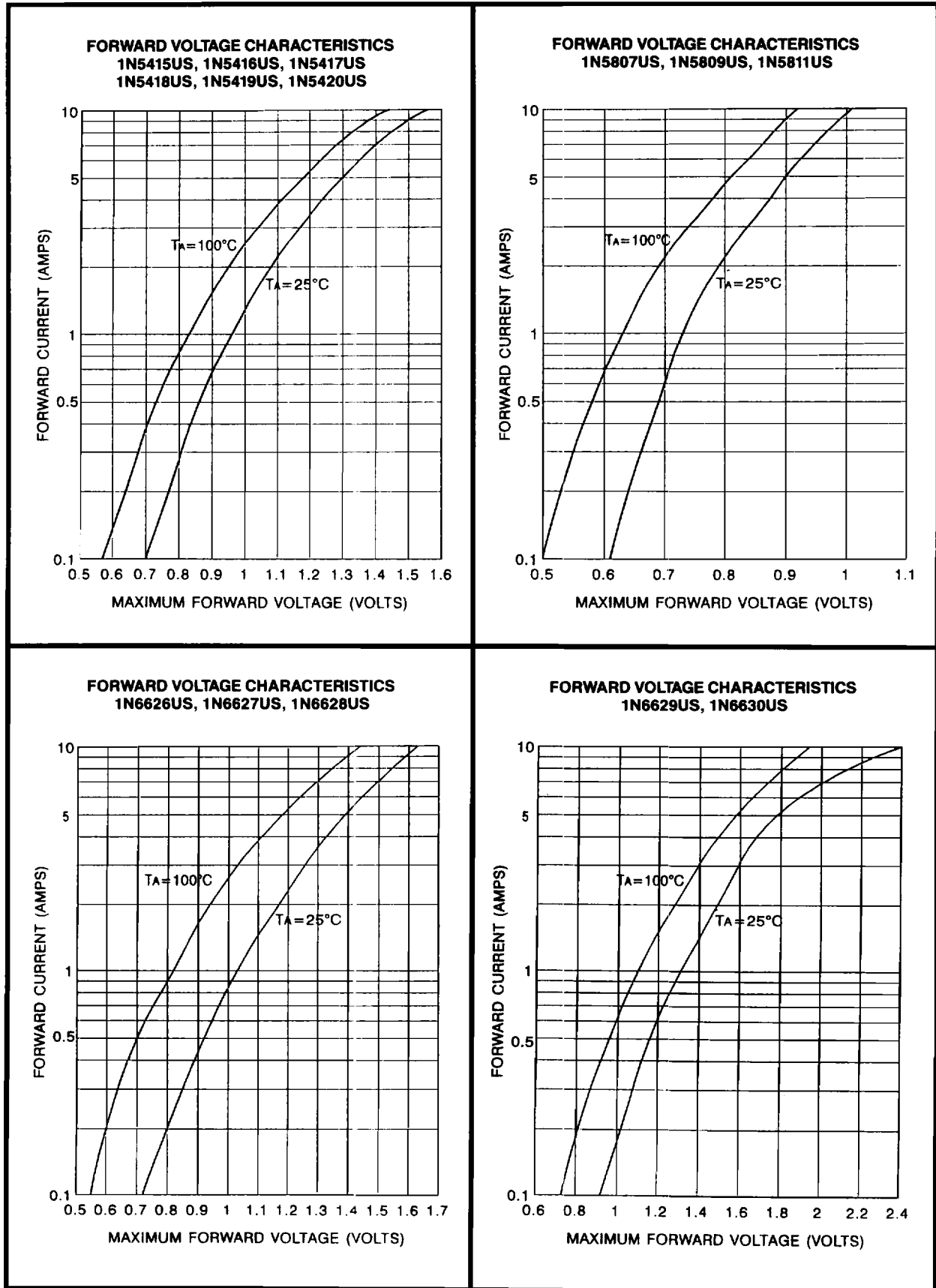
CHARACTERISTIC CURVES



CHARACTERISTIC CURVES



CHARACTERISTIC CURVES



CHARACTERISTIC CURVES

