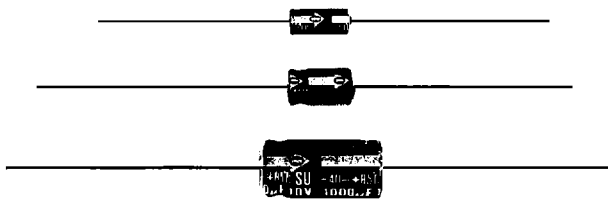


# SU Series

## Features

- For general purpose
- Wide CV value range
- Life 2000 hours at +85°C
- Compact size (φ3.5 × 7 ~)



## Specifications

Item	Performance Characteristics																												
Rated Working Voltage Range	6.3 to 100V DC	160 to 450V DC																											
Operating Temperature Range	-40 to +85°C	-25 to +85°C																											
Nominal Capacitance Range	0.1 to 22000μF	1 to 470μF																											
Capacitance Tolerance	±20% (120Hz, +20°C)																												
Leakage Current	$I \leq 0.03CV$ or $4 [\mu A]$ / after 1 minute $I \leq 0.01CV$ or $3 [\mu A]$ / after 2 minutes whichever is greater measured with rated working voltage applied at +20°C																												
tan δ	<table border="1"> <tr> <td>Working voltage [V]</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>tan δ max.</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.09</td> <td>0.08</td> </tr> </table>		Working voltage [V]	6.3	10	16	25	35	50	63	100	tan δ max.	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08									
	Working voltage [V]	6.3	10	16	25	35	50	63	100																				
	tan δ max.	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08																				
<table border="1"> <tr> <td>Working voltage [V]</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <td>tan δ max.</td> <td>0.16</td> <td>0.18</td> <td>0.18</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> </tr> </table>		Working voltage [V]	160	200	250	350	400	450	tan δ max.	0.16	0.18	0.18	0.20	0.20	0.20														
Working voltage [V]	160	200	250	350	400	450																							
tan δ max.	0.16	0.18	0.18	0.20	0.20	0.20																							
(120Hz, +20°C) For capacitance value >1000μF, add 0.02 per another 1000μF Refer to standard products table for φ3.5mm																													
Ripple Current	Refer to standard products table (120Hz, +85°C) Correction factor for frequency																												
	<table border="1"> <tr> <td>Frequency [Hz]</td> <td>50/60</td> <td>120</td> <td>1k</td> <td>10k</td> </tr> <tr> <td>Correction factor (Multiplier)</td> <td>0.7</td> <td>1</td> <td>1.3</td> <td>1.7</td> </tr> </table>		Frequency [Hz]	50/60	120	1k	10k	Correction factor (Multiplier)	0.7	1	1.3	1.7																	
Frequency [Hz]	50/60	120	1k	10k																									
Correction factor (Multiplier)	0.7	1	1.3	1.7																									
Impedance	Maximum C-Z (rated Cap. [μF] × Impedance [Ω]) value at 10kHz																												
	<table border="1"> <tr> <td>Working voltage [V]</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>C-Z max. at +20°C</td> <td>220</td> <td>160</td> <td>125</td> <td>90</td> <td>80</td> <td>60</td> <td>55</td> <td>50</td> </tr> <tr> <td>C-Z max. at -25°C</td> <td>3000</td> <td>1900</td> <td>1300</td> <td>800</td> <td>650</td> <td>560</td> <td>500</td> <td>450</td> </tr> </table>		Working voltage [V]	6.3	10	16	25	35	50	63	100	C-Z max. at +20°C	220	160	125	90	80	60	55	50	C-Z max. at -25°C	3000	1900	1300	800	650	560	500	450
	Working voltage [V]	6.3	10	16	25	35	50	63	100																				
	C-Z max. at +20°C	220	160	125	90	80	60	55	50																				
C-Z max. at -25°C	3000	1900	1300	800	650	560	500	450																					
<table border="1"> <tr> <td>Working voltage [V]</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>450</td> </tr> <tr> <td>C-Z max. at +20°C</td> <td>100</td> <td>140</td> <td>150</td> <td>170</td> <td>270</td> </tr> <tr> <td>C-Z max. at -25°C</td> <td>2400</td> <td>2500</td> <td>3100</td> <td>3500</td> <td>12000</td> </tr> </table>		Working voltage [V]	160	200	250	350	450	C-Z max. at +20°C	100	140	150	170	270	C-Z max. at -25°C	2400	2500	3100	3500	12000										
Working voltage [V]	160	200	250	350	450																								
C-Z max. at +20°C	100	140	150	170	270																								
C-Z max. at -25°C	2400	2500	3100	3500	12000																								
High Temperature Loading	Test conditions Duration : 2000hours Ambient temperature : +85°C Applied voltage : Rated DC working voltage Post test requirements at +20°C Leakage current : ≤ Initial specified value Capacitance change : ≤ ±20% of initial measured value (≤ ±25% for φ3.5 & φ4.5mm) tan δ : ≤ 150% of initial specified value																												
Shelf Life	Test conditions Duration : 1000hours Ambient temperature : +85°C Applied voltage : (None) Post test requirements at +20°C Same limits for high temperature loading.																												

## Part Number System

<b>E</b>	<b>C</b>	<b>E</b>	<b>B</b>			<b>U</b>					
Common code			Shape	W.V. code		Series code	Capacitance code			Suffix (See page: 16)	

# Aluminum Electrolytic Capacitors Axial Lead Type

SU Series

## Dimensions

[mm]

Safety vent ( 10mm dia ) Vinyl sleeve

$L = 7 : L + 0.5 \text{ max}$   
 $L : 16 : L + 1.0 \text{ max}$   
 $L : 20 : L + 2.0 \text{ max}$

Body dia. $\phi D$	3.5	4.5	6.3	8	10	12.5	16	18	22.4
Lead dia. $\phi d$	0.45	0.5	0.6	0.6	0.6	0.8	0.8	0.8	0.8

## Case Size Table

$\phi D \times L$  [mm]

W.V. [V.DC] Cap. [ $\mu F$ ]	6.3	10	16	25	35	50	63	100
0.1						3.5 × 7		4.5 × 10.5
0.22						3.5 × 7		4.5 × 10.5
0.33						3.5 × 7		4.5 × 10.5
0.47						3.5 × 7		4.5 × 10.5
1						3.5 × 7		4.5 × 10.5
2.2				( 3.5 × 7 )		3.5 × 7		4.5 × 10.5
3.3				( 3.5 × 7 )		3.5 × 7		4.5 × 10.5
4.7				( 3.5 × 7 )	3.5 × 7	4.5 × 10.5		4.5 × 10.5
10			3.5 × 7	( 4.5 × 10.5 )	( 4.5 × 10.5 )	4.5 × 10.5	4.5 × 10.5	6.3 × 10.5
22	3.5 × 7	( 4.5 × 10.5 )	( 4.5 × 10.5 )	4.5 × 10.5	4.5 × 10.5	6.3 × 10.5	6.3 × 10.5	8 × 16
33	( 4.5 × 10.5 )	( 4.5 × 10.5 )	( 4.5 × 10.5 )	4.5 × 10.5	6.3 × 10.5	6.3 × 10.5	6.3 × 10.5	8 × 16
47	( 4.5 × 10.5 )	( 4.5 × 10.5 )	4.5 × 10.5	6.3 × 10.5	6.3 × 10.5	6.3 × 10.5	8 × 16	8 × 20
100	4.5 × 10.5	6.3 × 10.5	6.3 × 10.5	6.3 × 10.5	8 × 16	8 × 16	8 × 20	10 × 25
220	( 6.3 × 10.5 )	6.3 × 10.5	8 × 16	8 × 16	8 × 20	10 × 20	10 × 25	12.5 × 31.5
330	6.3 × 10.5	8 × 16	8 × 16	8 × 20	10 × 20	10 × 25	12.5 × 25	16 × 25
470	( 8 × 16 )	8 × 16	8 × 20	10 × 20	10 × 25	12.5 × 25	12.5 × 31.5	16 × 40
1,000	8 × 20	10 × 20	10 × 25	12.5 × 25	12.5 × 31.5	16 × 25	16 × 31.5	22.4 × 40
2,200	( 12.5 × 25 )	12.5 × 25	12.5 × 31.5	16 × 25	16 × 31.5	18 × 40	22.4 × 40	
3,300	12.5 × 25	12.5 × 31.5	16 × 25	16 × 31.5	16 × 40	22.4 × 40	22.4 × 50	
4,700	12.5 × 31.5	16 × 25	16 × 31.5	18 × 40	22.4 × 40	22.4 × 50		
6,800	( 16 × 31.5 )	16 × 31.5	16 × 40	22.4 × 40	22.4 × 50			
10,000	16 × 40	18 × 40	22.4 × 40	22.4 × 50				
15,000	18 × 40	22.4 × 40	22.4 × 50					
22,000	22.4 × 40	22.4 × 50						

W.V. [V.DC] Cap. [ $\mu F$ ]	160	200	250	350	400	450
1	6.3 × 10.5	6.3 × 10.5	6.3 × 16	6.3 × 16	8 × 16	8 × 16
2.2	6.3 × 16	6.3 × 16	8 × 16	8 × 20	8 × 20	10 × 20
3.3	6.3 × 16	8 × 16	8 × 16	10 × 20	10 × 20	10 × 25
4.7	6.3 × 16	8 × 16	8 × 20	10 × 20	10 × 25	12.5 × 25
10	8 × 20	10 × 20	10 × 20	12.5 × 25	12.5 × 25	16 × 25
22	10 × 20	10 × 25	12.5 × 25	16 × 25	16 × 31.5	16 × 40
33	10 × 25	12.5 × 25	12.5 × 25	16 × 31.5	16 × 40	18 × 40
47	12.5 × 25	12.5 × 25	12.5 × 31.5	16 × 40	18 × 40	22.4 × 50
100	16 × 25	16 × 31.5	16 × 40	22.4 × 40	22.4 × 50	
220	18 × 40	18 × 40	22.4 × 40			
330	22.4 × 40	22.4 × 50				
470	22.4 × 50					

( ) show non-standard items, use higher voltage items  
 \*40V is available on request

**Standard Products Table**

W.V. [V.DC]	Cap. [μF]	Part No.	Cap. tol. [%] (120Hz/+20°C)	D.C.L. (+20°C/2min.) [μA] max.	tan δ (120Hz/+20°C) max.	Ripple current (120Hz/+85°C) [mA] rms max.	Dimensions [mm]	
							φD	L
6.3	22	ECEB0JU220S	±20	3.0	0.30	20.7	3.5	7
	33	(ECEB0JU330S)		3.0	0.22	50	4.5	10.5
	47	(ECEB0JU470S)		3.0	0.22	70	4.5	10.5
	100	ECEB0JU101S		6.3	0.22	100	4.5	10.5
	220	(ECEB0JU221Y)		13.8	0.22	240	6.3	10.5
	330	ECEB0JU331Y		20.7	0.22	300	6.3	10.5
	470	(ECEB0JU471)		29.6	0.22	380	8	16
	1,000	ECEB0JU102S		63.0	0.22	580	8	20
	2,200	(ECEB0JU222)		138.6	0.24	890	12.5	25
	3,300	ECEB0JU332		207.9	0.26	1,020	12.5	25
	4,700	ECEB0JU472		296.1	0.28	1,170	12.5	31.5
	6,800	(ECEB0JU682)		428.4	0.32	1,270	16	31.5
	10,000	ECEB0JU103		630.0	0.40	1,450	16	40
	15,000	ECEB0JU153		945.0	0.50	1,700	18	40
	22,000	ECEB0JU223		1,386.0	0.64	2,000	22.4	40
10	22	(ECEB1AU220S)	±20	3.0	0.19	40	4.5	10.5
	33	(ECEB1AU330S)		3.3	0.19	60	4.5	10.5
	47	(ECEB1AU470S)		4.7	0.19	90	4.5	10.5
	100	ECEB1AU101Y		10.0	0.19	150	6.3	10.5
	220	ECEB1AU221Y		22.0	0.19	250	6.3	10.5
	330	ECEB1AU331		33.0	0.19	330	8	16
	470	ECEB1AU471		47.0	0.19	400	8	16
	1,000	ECEB1AU102		100.0	0.19	630	10	20
	2,200	ECEB1AU222		220.0	0.21	920	12.5	25
	3,300	ECEB1AU332		330.0	0.23	1,090	12.5	31.5
	4,700	ECEB1AU472		470.0	0.25	1,200	16	25
	6,800	ECEB1AU682		680.0	0.29	1,400	16	31.5
	10,000	ECEB1AU103		1,000.0	0.37	1,600	18	40
	15,000	ECEB1AU153		1,500.0	0.47	1,900	22.4	40
	22,000	ECEB1AU223		2,200.0	0.61	2,100	22.4	50
16	10	ECEB1CU100S	±20	3.0	0.25	19.6	3.5	7
	22	(ECEB1CU220S)		3.5	0.16	50	4.5	10.5
	33	(ECEB1CU330S)		5.2	0.16	80	4.5	10.5
	47	ECEB1CU470S		7.5	0.16	110	4.5	10.5
	100	ECEB1CU101Y		16.0	0.16	180	6.3	10.5
	220	ECEB1CU221		35.2	0.16	280	8	16
	330	ECEB1CU331		52.8	0.16	350	8	16
	470	ECEB1CU471		75.2	0.16	440	8	20
	1,000	ECEB1CU102		160.0	0.16	680	10	25
	2,200	ECEB1CU222		352.0	0.18	1,000	12.5	31.5
	3,300	ECEB1CU332		528.0	0.20	1,200	16	25
	4,700	ECEB1CU472		752.0	0.22	1,360	16	31.5
	6,800	ECEB1CU682		1,088.0	0.26	1,600	16	40
	10,000	ECEB1CU103		1,600.0	0.34	1,800	22.4	40
	15,000	ECEB1CU153		2,400.0	0.44	2,000	22.4	50
25	2.2	(ECEB1EU2R2S)	±20	3.0	0.20	9.0	3.5	7
	3.3	(ECEB1EU3R3S)		3.0	0.20	11.2	3.5	7
	4.7	(ECEB1EU4R7S)		3.0	0.20	14.7	3.5	7

( ) show non-standard, use higher voltage items.

**Standard Products Table**

W.V. [V.DC]	Cap. [μF]	Part No.	Cap. tol. [%] (120Hz/+20°C)	D.C.L. (+20°C/2min.) [μA] max.	tan δ (120Hz/+20°C) max.	Ripple current (120Hz/+85°C) [mA] rms max.	Dimensions [mm]	
							φD	L
25	10	(ECEB1EU100S)	±20	3.0	0.14	40.0	4.5	10.5
	22	ECEB1EU220S		5.5	0.14	60	4.5	10.5
	33	ECEB1EU330S		8.2	0.14	90	4.5	10.5
	47	ECEB1EU470Y		11.7	0.14	130	6.3	10.5
	100	ECEB1EU101Y		25.0	0.14	180	6.3	10.5
	220	ECEB1EU221		55.0	0.14	310	8	16
	330	ECEB1EU331		82.5	0.14	390	8	20
	470	ECEB1EU471		117.5	0.14	480	10	20
	1,000	ECEB1EU102		250.0	0.14	850	12.5	25
	2,200	ECEB1EU222		550.0	0.16	1,200	16	25
	3,300	ECEB1EU332		825.0	0.18	1,300	16	31.5
	4,700	ECEB1EU472		1,175.0	0.20	1,500	18	40
	6,800	ECEB1EU682		1,700.0	0.24	1,700	22.4	40
	10,000	ECEB1EU103		2,500.0	0.32	1,800	22.4	50
*35	4.7	ECEB1VU4R7S	±20	3.0	0.17	20	3.5	7
	10	(ECEB1VU100S)		3.5	0.12	45	4.5	10.5
	22	ECEB1VU220S		7.7	0.12	95	4.5	10.5
	33	ECEB1VU330Y		11.5	0.12	110	6.3	10.5
	47	ECEB1VU470Y		16.4	0.12	130	6.3	10.5
	100	ECEB1VU101		35.0	0.12	210	8	16
	220	ECEB1VU221		77.0	0.12	350	8	20
	330	ECEB1VU331		115.5	0.12	440	10	20
	470	ECEB1VU471		164.5	0.12	550	10	25
	1,000	ECEB1VU102		350.0	0.12	900	12.5	31.5
	2,200	ECEB1VU222		770.0	0.14	1,250	16	31.5
	3,300	ECEB1VU332		1,155.0	0.16	1,400	16	40
	4,700	ECEB1VU472		1,645.0	0.18	1,600	22.4	40
	6,800	ECEB1VU682		2,380.0	0.22	1,800	22.4	50
50	0.1	ECEB1HU0R1S	±20	3.0	0.15	0.7	3.5	7
	0.22	ECEB1HUR22S		3.0	0.15	1.6	3.5	7
	0.33	ECEB1HUR33S		3.0	0.15	2.5	3.5	7
	0.47	ECEB1HUR47S		3.0	0.15	3.5	3.5	7
	1	ECEB1HU010S		3.0	0.15	7.4	3.5	7
	2.2	ECEB1HU2R2S		3.0	0.15	12	3.5	7
	3.3	ECEB1HU3R3S		3.0	0.15	18	3.5	7
	4.7	ECEB1HU4R7S		3.0	0.10	30	4.5	10.5
	10	ECEB1HU100S		5.0	0.10	50	4.5	10.5
	22	ECEB1HU220Y		11.0	0.10	100	6.3	10.5
	33	ECEB1HU330Y		16.5	0.10	110	6.3	10.5
	47	ECEB1HU470Y		23.5	0.10	130	6.3	10.5
	100	ECEB1HU101		50.0	0.10	250	8	16
	220	ECEB1HU221		110.0	0.10	400	10	20
	330	ECEB1HU331		165.0	0.10	500	10	25
	470	ECEB1HU471		235.0	0.10	650	12.5	25
	1,000	ECEB1HU102		500.0	0.10	1,050	16	25
	2,200	ECEB1HU222		1,100.0	0.12	1,300	18	40
	3,300	ECER1HU332		1,650.0	0.14	1,500	22.4	40
	4,700	ECEB1HU472		2,350.0	0.16	1,700	22.4	50

( ) show non-standard items, use higher voltage items.

\*40V is available on request

**Standard Products Table**

W.V. [V.DC]	Cap. [ $\mu$ F]	Part No.	Cap. tol. [%] (120Hz/+20°C)	D.C.L. (+20°C/2min.) [ $\mu$ A] max.	tan $\delta$ (120Hz/+20°C) max.	Ripple current (120Hz/+85°C) [mA] rms max.	Dimensions [mm]	
							$\phi$ D	L
63	10	ECEB1JU100S	$\pm 20$	6.3	0.09	55	4.5	10.5
	22	ECEB1JU220Y		13.8	0.09	105	6.3	10.5
	33	ECEB1JU330Y		20.7	0.09	130	6.3	10.5
	47	ECEB1JU470		29.6	0.09	160	8	16
	100	ECEB1JU101		63.0	0.09	270	8	20
	220	ECEB1JU221		138.6	0.09	450	10	25
	330	ECEB1JU331		207.9	0.09	550	12.5	25
	470	ECEB1JU471		296.1	0.09	750	12.5	31.5
	1,000	ECEB1JU102		630.0	0.09	1,100	16	31.5
	2,200	ECEB1JU222		1,386.0	0.11	1,400	22.4	40
	3,300	ECEB1JU332		2,079.0	0.13	1,600	22.4	50
100	0.1	ECEB2AU0R1S	$\pm 20$	3.0	0.08	1.5	4.5	10.5
	0.22	ECEB2AU2R2S		3.0	0.08	3.8	4.5	10.5
	0.33	ECEB2AUR33S		3.0	0.08	5.0	4.5	10.5
	0.47	ECEB2AUR47S		3.0	0.08	10	4.5	10.5
	1	ECEB2AU010S		3.0	0.08	16	4.5	10.5
	2.2	ECEB2AU2R2S		3.0	0.08	24	4.5	10.5
	3.3	ECEB2AU3R3S		3.3	0.08	32	4.5	10.5
	4.7	ECEB2AU4R7S		4.7	0.08	40	4.5	10.5
	10	ECEB2AU100Y		10.0	0.08	70	6.3	10.5
	22	ECEB2AU220		22.0	0.08	115	8	16
	33	ECEB2AU330		33.0	0.08	145	8	16
	47	ECEB2AU470		47.0	0.08	180	8	20
	100	ECEB2AU101		100.0	0.08	350	10	25
	220	ECEB2AU221		220.0	0.08	550	12.5	31.5
	330	ECEB2AU331		330.0	0.08	700	16	25
470	ECEB2AU471	470.0	0.08	900	16	40		
1,000	ECEB2AU102	1,000.0	0.08	1,050	22.4	40		
160	1	ECEB2CU010	$\pm 20$	19.6	0.16	13	6.3	10.5
	2.2	ECEB2CU2R2		31.1	0.16	24	6.3	16
	3.3	ECEB2CU3R3		41.6	0.16	31	6.3	16
	4.7	ECEB2CU4R7		55.1	0.16	40	6.3	16
	10	ECEB2CU100		106.0	0.16	63	8	20
	22	ECEB2CU220		221.2	0.16	108	10	20
	33	ECEB2CU330		326.8	0.16	144	10	25
	47	ECEB2CU470		461.2	0.16	180	12.5	25
	100	ECEB2CU101		970.0	0.16	270	16	25
	220	ECEB2CU221		2,122.0	0.16	400	18	40
	330	ECEB2CU331		3,178.0	0.16	490	22.4	40
470	ECEB2CU471	4,522.0	0.16	570	22.4	50		
200	1	ECEB2DU010	$\pm 20$	22.0	0.18	16	6.3	10.5
	2.2	ECEB2DU2R2		36.4	0.18	27	6.3	16
	3.3	ECEB2DU3R3		49.6	0.18	36	8	16
	4.7	ECEB2DU4R7		66.4	0.18	45	8	16
	10	ECEB2DU100		130.0	0.18	72	10	20
	22	ECEB2DU220		274.0	0.18	126	10	25
	33	ECEB2DU330		406.0	0.18	157	12.5	25

**Standard Products Table**

W.V. [V.DC]	Cap. [ $\mu$ F]	Part No.	Cap. tol. [%] (120Hz/+20°C)	D.C.L. (+20°C/2min.) [ $\mu$ A] max.	tan $\delta$ (120Hz/+20°C) max.	Ripple current (120Hz/+85°C) [mA] rms max.	Dimensions [mm]	
							$\phi$ D	L
200	47	ECEB2DU470	$\pm 20$	574.0	0.18	193	12.5	25
	100	ECEB2DU101		1,210.0	0.18	306	16	31.5
	220	ECEB2DU221		1,650.0	0.18	440	18	40
	330	ECEB2DU331		3,970.0	0.18	540	22.4	50
250	1	ECEB2EU010	$\pm 20$	25.0	0.18	18	6.3	16
	2.2	ECEB2EU2R2		43.0	0.18	31	8	16
	3.3	ECEB2EU3R3		59.5	0.18	40	8	16
	4.7	ECEB2EU4R7		80.5	0.18	49	8	20
	10	ECEB2EU100		160.0	0.18	81	10	20
	22	ECEB2EU220		340.0	0.18	144	12.5	25
	33	ECEB2EU330		505.0	0.18	171	12.5	25
	47	ECEB2EU470		715.0	0.18	207	12.5	31.5
	100	ECEB2EU101		1,510.0	0.18	340	16	40
	220	ECEB2EU221		3,310.0	0.18	500	22.4	40
350	1	ECEB2VU010	$\pm 20$	31.0	0.20	20	6.3	16
	2.2	ECEB2VU2R2		56.2	0.20	36	8	20
	3.3	ECEB2VU3R3		79.3	0.20	44	10	20
	4.7	ECEB2VU4R7		108.7	0.20	60	10	20
	10	ECEB2VU100		220.0	0.20	96	12.5	25
	22	ECEB2VU220		472.0	0.20	160	16	25
	33	ECEB2VU330		703.0	0.20	200	16	31.5
	47	ECEB2VU470		997.0	0.20	240	16	40
	100	ECEB2VU101		2,110.0	0.20	350	22.4	40
400	1	ECEB2GU010	$\pm 20$	34.0	0.20	21	8	16
	2.2	ECEB2GU2R2		62.8	0.20	36	8	20
	3.3	ECEB2GU3R3		89.2	0.20	46	10	20
	4.7	ECEB2GU4R7		122.8	0.20	61	10	25
	10	ECEB2GU100		250.0	0.20	100	12.5	25
	22	ECEB2GU220		538.0	0.20	160	16	31.5
	33	ECEB2GU330		802.0	0.20	205	16	40
	47	ECEB2GU470		1,138.0	0.20	260	18	40
	100	ECEB2GU101		2,410.0	0.20	370	22.4	50
450	1	ECEB2WU010	$\pm 20$	37.0	0.20	21	8	16
	2.2	ECEB2WU2R2		69.4	0.20	38	10	20
	3.3	ECEB2WU3R3		99.1	0.20	49	10	25
	4.7	ECEB2WU4R7		136.9	0.20	63	12.5	25
	10	ECEB2WU100		280.0	0.20	105	16	25
	22	ECEB2WU220		604.0	0.20	161	16	40
	33	ECEB2WU330		901.0	0.20	210	18	40
	47	ECEB2WU470		1,279.0	0.20	260	22.4	50