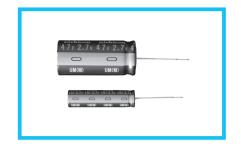


Radial Lead Type, Standard

- Standard type (2.7V).
- Suitable for quick charge and discharge.
- Wide temperature range (- 25 to +70°C).
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

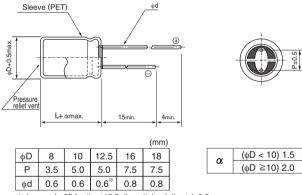




## ■Specifications

Item	Performance Characteristics				
Category Temperature Range	- 25 to +70°C				
Rated Voltage Range	2.7V				
Rated Capacitance Range	1 to 47F See Note				
Capacitance Tolerance	±20%, 20°C				
Stability at Low Temperature	Capacitance (- 25°C) / Capacitance (+20°C) ×100 ≥ 70% ESF	R (- 25°C) / ESR (+20°C)	) ≤ 4		
ESR, DCR*	Refer to the table below (20°C). *DC internal resistance				
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at $70^{\circ}$ C.	Capacitance change ESR	Within ±30% of the initial capacitance value 300% or less than the initial specified value		
Shelf Life	The specifications listed at right shall be met when the capacitors are restored to $20^{\circ}\text{C}$ after storing the capacitors under no load for 1000 hours at $70^{\circ}\text{C}$ .	Capacitance change ESR	Within ±30% of the initial capacitance value 300% or less than the initial specified value		
Humidity Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 500 hours at 40°C 90%RH.	Capacitance change ESR	Within ±30% of the initial capacitance value 300% or less than the initial specified value		
Marking	Printed with white color letter on black sleeve.				

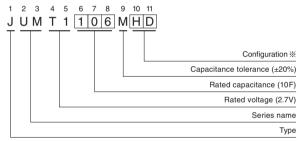
## Drawing



In case L>25 for the φ12.5 dia unit, lead dia φd=0.8

#### Please refer to the Guidelines for Aluminum Electrolytic Capacitors for end seal configuration information.

## Type numbering system (Example: 2.7V 10F)



Configuration					
φD	Pb-free lead finishing Pb-free PET sleeve				
8 • 10	PD				
12.5 to 18	HD				

## ■ Dimensions

Rated Voltage ( Code )	Rated Capacitance (F)	Code	ESR (Ω) (at 1kHz)	DCR* Typical (Ω)	Case size φ D × L (mm)
	1	105	1.8	3	8 × 11.5
	2.2	225	1.0	1.3	8 × 20
	3.3	335	0.6	1.0	10 × 20
2.7V	4.7	475	0.4	0.6	12.5 × 20
(T1)	10	106	0.2	0.25	12.5 × 31.5
	22	226	0.07	0.13	16 × 31.5
	33	336	0.06	0.08	18 × 31.5
	47	476	0.05	0.06	18 × 40

### Note:

The capacitance calculated from discharge time ( $\Delta T$ ) with constant current ( i ) after 30minuite charge with rated voltage (2.7V).

The discharge current ( i ) is  $0.01 \times \text{rated capacitance}$  (F).

The discharge time ( $\Delta T$ ) measured between 2V and 1V with constant current.

The capacitance calculated bellow.

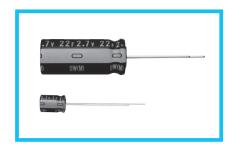
<sup>\*</sup> The listed DCR value is typical and therefore not a guaranteed value.



Radial Lead Type, High Capacitance

- High Capacitance type (2.7V).
- Higher capacitance than JUM.
- Wide temperature range (- 25 to +70°C).
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

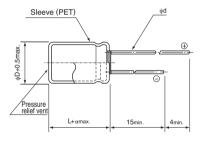




## ■ Specifications

Item	Performance Characteristics				
Category Temperature Range	- 25 to +70°C				
Rated Voltage	2.7V				
Rated Capacitance Range	1 to 82F See Note				
Capacitance Tolerance	±20%, 20°C				
Stability at Low Temperature	Capacitance (- 25°C) / Capacitance (+20°C) ×100 ≥ 70% ESF	R (- 25°C) / ESR (+20°C)	) ≦4		
ESR, DCR*	Refer to the table below (20°C). *DC internal resistance				
	The specifications listed at right shall be met when the capacitors	Capacitance change	Within ±30% of the initial capacitance value		
Endurance	are restored to 20°C after the rated voltage is applied for 1000 hours	ESR	300% or less than the initial specified value		
	at 70°C.				
	The specifications listed at right shall be met when the capacitors	Capacitance change	Within ±30% of the initial capacitance value		
Shelf Life	are restored to 20°C after storing the capacitors under no load	ESR	300% or less than the initial specified value		
	for 1000 hours at 70°C.				
	The specifications listed at right shall be met when the capacitors	Capacitance change	Within ±30% of the initial capacitance value		
Humidity Endurance	are restored to 20°C after the rated voltage is applied for 500 hours	ESR	300% or less than the initial specified value		
	at 40°C 90%RH.				
Marking	Printed with white color letter on black sleeve.	·			

## Drawing



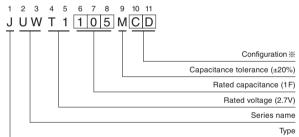


						(mm)
φD	6.3	8	10	12.5	16	18
Р	2.5	3.5	5.0	5.0	7.5	7.5
φd	0.5	0.6	0.6*	0.6*	0.8	0.8

α	(φD < 10) 1.5
α	(¢D ≥10) 2.0

- Please refer to the Guidelines for Aluminum Electrolytic Capacitors for end seal configuration information.

## Type numbering system (Example: 2.7V 1F)



Configuration

& Configuration					
φD	Pb-free lead finishing Pb-free PET sleeve				
6.3	CD				
8 • 10	PD				
12.5 to 18	HD				

## Dimensions

Rated Voltage ( Code )	Rated Capacitance (F)	Code	ESR (Ω) (at 1kHz)	DCR* Typical (Ω)	Case size φ D × L (mm)
	1.0	105	1.8	4	6.3 × 9
	1.5	155	1.2	2.5	8 × 11.5
	2.7	275	0.6	1.2	8 × 20
	3.3	335	0.5	1.1	10 × 12.5
2.7V	4.7	475	0.4	0.8	10 × 20
(T1)	6.8	685	0.3	0.7	12.5 × 20
(11)	12	126	0.3	0.6	10 × 31.5
	22	226	0.2	0.4	12.5 × 31.5
	33	336	0.12	0.28	16 × 31.5
	47	476	0.1	0.22	18 × 31.5
	82	826	0.06	0.13	18 × 40

<sup>\*</sup> The listed DCR value is typical and therefore not a guaranteed value.

### Note:

The capacitance calculated from discharge time ( $\Delta T$ ) with constant current ( i ) after 30minuite charge with rated voltage (2.7V).

The discharge current (i) is 0.01 × rated capacitance (F).

The discharge time ( $\Delta T$ ) measured between 2V and 1V with constant current.

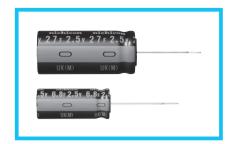
The capacitance calculated bellow.



Radial Lead Type, Lower Resistance

- Lower resistance type of JUM.
- Suited for Smart Meters.
- Lower temperature range (- 40 to +70°C).
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

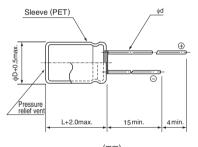




## ■ Specifications

Item	Performance Characteristics				
Category Temperature Range	- 40 to +70°C				
Rated Voltage	2.5V				
Rated Capacitance	6.8 to 27F See Note				
Capacitance Tolerance	±20%, 20°C				
Stability at Low Temperature	Capacitance (- 40°C) / Capacitance (+20°C) ×100 ≥ 70% ESI	R (- 40°C) / ESR (+20°C)	) ≦7		
ESR, DCR*	Refer to the table below (20°C). *DC internal resistance				
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 70°C.	Capacitance change ESR	Within ±30% of the initial capacitance value 300% or less than the initial specified value		
Shelf Life	The specifications listed at right shall be met when the capacitors are restored to 20°C after storing the capacitors under no load for 1000 hours at 70°C.	Capacitance change ESR	Within ±30% of the initial capacitance value 300% or less than the initial specified value		
Humidity Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 500 hours at 40°C 90%RH.	Capacitance change ESR	Within ±30% of the initial capacitance value 300% or less than the initial specified value		
Marking	Printed with white color letter on black sleeve.				

## Drawing

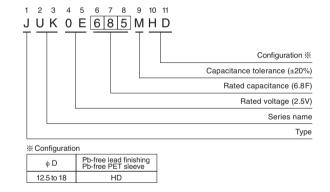




			(mm)
φD	12.5	16	18
Р	5.0	7.5	7.5
φd	0.8	0.8	0.8

 Please refer to the Guidelines for Aluminum Electrolytic Capacitors for end seal configuration information.

## Type numbering system (Example: 2.5V 6.8F)



## ■Dimensions

Rated Voltage ( Code )	Rated Capacitance (F)	Code	ESR (Ω) (at 1kHz)	DCR* Typical (Ω)	Case size φ D × L (mm)
	6.8	685	0.075	0.085	12.5 × 31.5
2.5V	12	126	0.060	0.065	16 × 31.5
(0E)	18	186	0.055	0.055	18 × 31.5
	27	276	0.040	0.035	18 × 40

\* The listed DCR value is typical and therefore not a guaranteed value.

## Note:

The capacitance calculated from discharge time ( $\Delta T$ ) with constant current ( i ) after 30minuite charge with rated voltage (2.5V).

The discharge current (i) is 0.01 × rated capacitance (F).

The discharge time ( $\Delta T)$  measured between 2V and 1V with constant current.

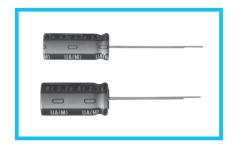
The capacitance calculated bellow.



Radial Lead Type, Lower Resistance, Long Life

- Lower resistance and long life type of JUM.
- Lower temperature range (- 40 to +70°C).
- Load life of 2000hours at 70°C.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

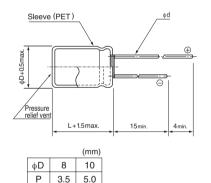




#### Specifications

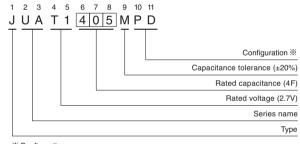
Item	Performance Characteristics			
Category Temperature Range	- 40 to +70°C			
Rated Voltage	2.7V			
Rated Capacitance	1.2 to 4.7F See Note			
Capacitance Tolerance	±20%, 20°C			
Stability at Low Temperature	Capacitance (-40°C) / Capacitance (+20°C) ×100 ≥ 70% ESF	R (- 40°C) / ESR (+20°C)	) ≦7	
ESR	Refer to the table below (20°C).			
F. 1	The specifications listed at right shall be met when the capacitors	Capacitance change	Within ±30% of the initial capacitance value	
Endurance	are restored to 20°C after the rated voltage is applied for 2000 hours at $70^{\circ}$ C.	400% or less than the initial specified value		
	The specifications listed at right shall be met when the capacitors	Capacitance change	Within ±30% of the initial capacitance value	
Shelf Life	are restored to 20°C after storing the capacitors under no load	ESR	400% or less than the initial specified value	
	for 1000 hours at 70°C.			
	The specifications listed at right shall be met when the capacitors	Capacitance change	Within ±30% of the initial capacitance value	
Humidity Endurance	are restored to 20°C after the rated voltage is applied for 500 hours	ESR	300% or less than the initial specified value	
	at 40°C 90%RH.			
Marking	Printed with white color letter on black sleeve.			

## Drawing





## Type numbering system (Example : 2.7V 4F)



* Configuration					
φD	Pb-free lead finishing Pb-free PET sleeve				
0.10	DD				

## Dimensions

φd

0.6

	<del></del>									
Rated Voltage ( Code )	Rated Capacitance (F)	Code	ESR (Ω) (at 1kHz)	DCR※ Typical(Ω)	Case size φ D × L (mm)					
	1.2	125	0.40	0.40	8 × 11.5					
2.7V	2.0	205	0.25	0.25	10 × 12.5					
(T1)	2.5	255	0.15	0.15	8 × 20					
	4.0	405	0.10	0.10	10 × 20					
	4.7	475	0.15	0.13	10 × 20					

#### Note

The capacitance calculated from discharge time ( $\Delta T$ ) with constant current ( i ) after 30minuite charge with rated voltage (2.7V).

The discharge current (i) is 0.01 × rated capacitance (F).

The discharge time ( $\Delta T$ ) measured between 2V and 1V with constant current.

The capacitance calculated bellow.

<sup>\*</sup> The listed DCR value is typical and therefore not a guaranteed value.



Snap-in Terminal Type

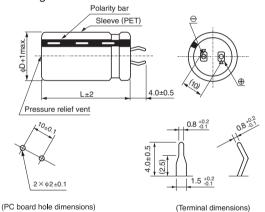
- Excellent in voltage holding property.
- Suitable for quick charge and discharge.
- Wide temperature range (- 25°C to + 60°C).
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).



## ■ Specifications

Item	Performance Characteristics					
Category Temperature Range	- 25 to +60°C					
Rated Voltage Range	2.5V					
Rated Capacitance Range	56 to 200F See Note					
Capacitance Tolerance	±20% (20°C)					
Stability at Low Temperature	Capacitance (-25°C) / Capacitance (+20°C) ×100 ≥ 70% ESF	R (- 25°C) / ESR (+20°C)	) ≦ 7			
ESR, DCR*	Refer to the table below (20°C). *DC internal resistance					
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 60°C.	Capacitance change ESR	Within ±30% of the initial capacitance value 300% or less than the initial specified value			
Shelf Life	The specifications listed at right shall be met when the capacitors are restored to 20°C after storing the capacitors under no load for 2000 hours at 60°C.	Capacitance change ESR	Within ±30% of the initial capacitance value 300% or less than the initial specified value			
Humidity Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 500 hours at 40°C 90%RH.	Capacitance change ESR	Within ±30% of the initial capacitance value 300% or less than the initial specified value			
Marking	Printed with white color letter on black sleeve.					

## Drawing

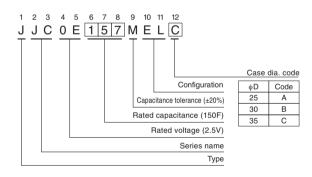


## ■ Dimensions

Rated Voltage	Cap.		Cap. ESR(mΩ) DCR <sup>※</sup>		Cas	Case size $\phi D \times L \text{ (mm)}$		
( code )	Cap.	code	(at 1kHz)	Typical (mΩ)	φ 25 (A)	φ30 (B)	φ 35 (C)	
	56	566	70	50	25 × 40	30×30		
	68	686	60	45			35×30	
0.51/	82	826	60	35	25×50	30×40		
2.5V (0E)	100	107	50	30			35 × 35	
(02)	120	127	50	25		30×50	35×40	
	150	157	40	22			35×50	
	200	207	30	16			35×50	

 $<sup>\</sup>ensuremath{\mathtt{\#}}$  The listed DCR value is typical and therefore not a guaranteed value.

## Type numbering system (Example: 2.5V 150F)



#### Note:

The capacitance calculated from discharge time ( $\Delta T$ ) with constant current ( i ) after 30minuite charge with rated voltage (2.5V).

The discharge current ( i ) is 0.01  $\times$  rated capacitance (F). The discharge time ( $\Delta T)$  measured between 2V and 1V with constant current.

The capacitance calculated bellow.



Screw Terminal Type, High Energy Density Type

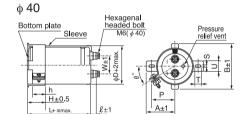
- High energy density.
- Suitable for electric power storage.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

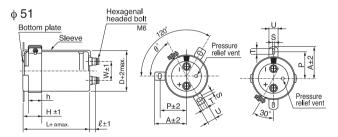


#### ■ Specifications

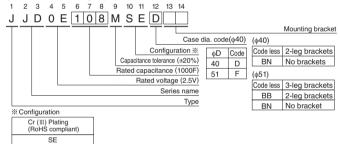
•						
Item	Performa	Performance Characteristics				
Category Temperature Range	- 25 to +60°C					
Rated Voltage Range	2.5V					
Rated Capacitance Range	1000 to 2500F See Note					
Capacitance Tolerance	±20%, 20°C					
Stability at Temperature	Capacitance (- 25°C) / Capacitance (+20°C) ×100 ≥ 70% DC	R (- 25°C) / DCR(+20°C)	≤7			
DCR*	Refer to the table below (20°C). *DC internal resistance					
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 60°C.	Capacitance change DCR	Within ±30% of the initial capacitance value 300% or less than the initial specified value			
Shelf Life	The specifications listed at right shall be met when the capacitors are restored to 20°C after storing the capacitors under no load for 2000 hours at 60°C.	Capacitance change DCR	Within ±30% of the initial capacitance value 300% or less than the initial specified value			
Humidity Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 500 hours at 40°C 90%RH.	Capacitance change DCR	Within ±30% of the initial capacitance value 300% or less than the initial specified value			
Marking	Printed with white color letter on black sleeve.					

## Drawing





## Type numbering system (Example: 2.5V 1000F)



## Note:

The capacitance calculated from discharge time ( $\Delta T$ ) with constant current (i) after 30minuite charge with rated voltage (2.5V).

The discharge current (i) is 0.01 × rated capacitance (F).

The discharge time ( $\Delta T$ ) measured between 2V and 1V with constant current.

The capacitance calculated bellow. Capacitance (F) =  $i \times \Delta T$ 

## ullet Dimensions of terminal pitch(W) and length( $\ell$ ) and Normal dia. of bolt (mm)

φD	W	l	α	Nominal of bolt
40	18.8	9	3	M6
51	26.0	10	3	M6

## Dimensions

Rated Voltage	Сар.	Сар.	DCR*	Case size		Ref. Weight
( Code )	(F)	code	Typical (mΩ)	φ (mm)	L (mm)	(g)
	1000	108	8.0	40	105	210
2.5V	1300	138	6.0	51	135	250
(0E)	2300	238	4.0		135	450
	2500	258	3.5		142	500

<sup>\*</sup> The listed DCR value is typical and therefore not a guaranteed value.

#### • Dimensions of mounting bracket (mm)

- Bimenelene of meaning bracket						
Leg shape	3-Legs	2-L	egs			
Symbol $\phi D$	51	40	51			
Р	32.5	27	33.2			
Α	38.5	32	40			
В	-	48	_			
Т	7.5		6.0			
S	5.0	3.5	4.5			
U	12 10		14			
θ°	60	45	30			
Н	20	17	25			
h	15	12	15			

Note)The brackets will be supplied in the separate box.



Screw Terminal Type, High Power Density Type

- High power density.
- Rapid charge-discharge.
- Suitable for regeneration and UPS applications.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

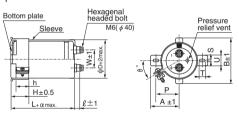


## ■ Specifications

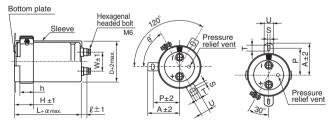
Item	Performance Characteristics					
Category Temperature Range	- 25 to +60°C					
Rated Voltage Range	2.5V					
Rated Capacitance Range	700 to 2000F See Note					
Capacitance Tolerance	±20%(20°C)					
Stability at Low Temperature	Capacitance (- 25°C) / Capacitance (+20°C) ×100 ≥ 70% DC	R (– 25°C) / DCR (+20°C	) ≤ 7			
DCR*	Refer to the table below (20°C). *DC internal resistance					
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 60°C.	Capacitance change DCR	Within ±30% of the initial capacitance value 300% or less than the initial specified value			
Shelf Life	The specifications listed at right shall be met when the capacitors are restored to 20°C after storing the capacitors under no load for 2000 hours at 60°C.	Capacitance change DCR	Within ±30% of the initial capacitance value 300% or less than the initial specified value			
Humidity Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 500 hours at 40°C 90%RH.	Capacitance change DCR	Within ±30% of the initial capacitance value 300% or less than the initial specified value			
Marking	Printed with white color letter on black sleeve.					

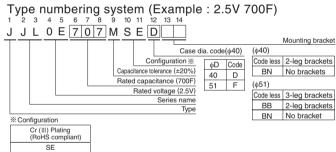
## Drawing

## φ 40



## φ51





The capacitance calculated from discharge time ( $\Delta T$ ) with constant current (i) after 30minuite charge with rated voltage (2.5V). The discharge current ( i ) is 0.01  $\times$  rated capacitance (F). The discharge time ( $\Delta T$ ) measured between 2V and 1V with constant current.

The capacitance calculated bellow.

Capacitance (F) =  $i \times \Delta T$ 

#### ullet Dimensions of terminal pitch(W) and length( $\ell$ ) and Normal dia. of bolt (mm)

		,	• , ,	
φD	W	l	α	Nominal of bolt
40	18.8	9	3	M6
51	26.0	10	3	M6

#### Dimensions

Rated	Rated Voltage (Code) Cap. Cap. code		DCR**	Case size	Ref. Weight	
			Typical (mΩ)	φD	L	(g)
	700	707	3.5		105	210
2.5V	1000	108	2.5	40 51	142	250
(0E)	1200	128	2.2		167	300
(0L)	1100	118	2.8		105	380
	1700	178	1.7		142	500
	2000	208	1.5		167	600

<sup>\*</sup> The listed DCR value is typical and therefore not a guaranteed value.

#### Dimensions of mounting bracket (mm)

Birrioriologic of mounting bracket					
Leg shape	3-Legs	2-Legs			
Symbol $\phi D$	51	40	51		
Р	32.5	27	33.2		
Α	38.5	32	40		
В	_	48	_		
Т	7.5	7.0	6.0		
S	5.0	3.5	4.5		
U	12	10	14		
θ°	60	45	30		
Н	20	17	25		
h	15	12	15		

Note)The brackets will be supplied in the separate box.

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**Authorized Distributor** 

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## Nichicon:

JJD0E108MSEDBN JJC0E826MELB JJC0E826MELA JJC0E686MELC JJC0E566MELB JJC0E566MELA

JJC0E396MELC JJC0E336MELC JJC0E477MSECBN JJC0E157MELC JJC0E186MELA JJC0E276MELB

JJC0E226MELB JJC0E127MELB JJC0E107MELC JJC0E127MELC JJL0E707MSED JUMT1476MHD

JJD0E108MSED JJD0E258MSEF JUMT1336MHD JUMT1106MHD JUMT1226MHD JUMT1475MHD

JUMT1335MPD JUMT1105MPD JUMT1474MED JJD0E238MSEF JUMT1225MPD JJL0E857MSED

JJD0E138MSED JJL0E268MSEG JJL0E158MSEF JJL0E168MSEF JUWT1126MPD JUWT1155MPD

JUWT1226MHD JUWT1275MPD JUWT1336MHD JUWT1475MPD JUWT1476MHD JUWT1685MHD

JUWT1826MHD JUWT1105MCD JUK0E126MHD JUK0E186MHD JUK0E276MHD JUK0E685MHD

JJL0E158MSECBB JJL0E158MSECBN JJL0E168MSECBB JJL0E168MSECBN JJL0E268MSECBB JUM0H184ACD

JJL0E158MSEFBN JJL0E707MSEDBN JJL0E857MSEDBN JJL0E268MSEGBN JJD0E408MSEGBN

JJD0E258MSEFBN JJD0E238MSEFBN JJD0E138MSEDBN JJD0E258MSEFBB JJD0E238MSEFBB

JUWT1335MPD JUWT1126MHD JJL0E158MSEFBB JJL0E178MSEF JJL0E268MSEGBB JJL0E178MSEFBB

JJL0E178MSEFBN JJL0E208MSEF JJL0E208MSEFBB JJL0E208MSEFBN JJD0E608MSEHBB JJC0E207MELC

JJD0E408MSEGBB JJD0E608MSEHBN