



TYPE 285D

Foil Tantalum Replacement

Gelled-Electrolyte Sintered Anode TANTALEX® Capacitors
For Operation to + 125°C, Hermetically-Sealed



FEATURES

Type 285D capacitors are commercial replacements for Military Style M39006/01, 02, 03, 04 and are designed to meet the performance requirements of Military Specification MIL-C-39006. Internal cells are M39006/22 & 25.

They feature a high ripple current capability with an extended temperature range, very low impedances over wide frequency ranges and a long history of reliable operation.

PERFORMANCE CHARACTERISTICS

Operating Temperature: - 55°C to + 85°C.
(To +125°C with voltage derating.)

Capacitance Tolerance: At 120 Hz, + 25°C. ± 20% standard. ± 10%, ± 5% available as special.

DC Leakage Current (DCL Max.):

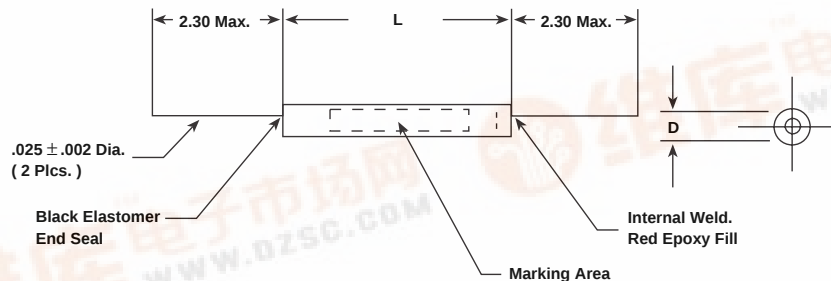
At + 25°C, + 85°C, + 125°C: Leakage current shall not exceed the values listed in the Standard Ratings Tables.

Life Test: Capacitors are capable of withstanding a 2000 hour life test at a temperature of + 85°C or + 125°C at the applicable DC working voltage. Following the life test:

1. DCL shall not exceed the initial requirements.
2. The DF shall meet the initial requirement.
3. Change in capacitance shall not exceed 10% from the initial measurement. For capacitors with voltage ratings of 15 WVDC and below, change in capacitance shall not exceed + 10%, - 25% from the initial measurement.

DIMENSIONAL CONFIGURATIONS [Numbers in brackets indicate millimeters]

Case Material: Aluminum
Case Neutral



CASE CODE	BARE CASE		WITH INSULATION SLEEVE	
	L	D	D (MAX.)	C (MAX.)
G1	0.688 ± 0.062 [17.48 ± 1.57]	0.188 ± 0.016 [4.78 ± 0.41]	0.219 [5.56]	1.188 [30.18]
G2	0.969 ± 0.062 [24.61 ± 1.57]	0.281 ± 0.016 [7.14 ± 0.41]	0.312 [7.92]	1.469 [37.31]
G3	1.438 ± 0.062 [36.53 ± 1.57]	0.375 ± 0.016 [9.53 ± 0.41]	0.406 [10.31]	1.938 [49.23]
G4	2.125 ± 0.062 [53.98 ± 1.57]	0.375 ± 0.016 [9.53 ± 0.41]	0.406 [10.31]	2.625 [66.68]
G5	2.750 ± 0.062 [69.85 ± 1.57]	0.375 ± 0.016 [9.53 ± 0.41]	0.406 [10.31]	3.250 [82.55]

STANDARD/EXTENDED RATINGS, POLARIZED

CAPACITANCE (μF)	CASE CODE	CAP. TOL. (±%)	PART NUMBER*	Max. DCL (μA) @		Max. IMP. @ - 55°C (Ohms)
				+ 25°C	+ 85°C + 125°C	
15 WVDC @ + 85°C . . . 10 WVDC @ + 125°C						
18.0	G2	20	285D186X0015G2	2.0	4.0	125
55.0	G3	20	285D556X0015G2	2.0	10.0	41
110.0	G4	20	285D117X0015G4	4.0	20.0	20
160.0	G5	20	285D167X0015G5	5.0	30.0	14

TYPE 285D

STANDARD/EXTENDED RATINGS, POLARIZED						
CAPACITANCE (μF)	CASE CODE	CAP. TOL. (±%)	PART NUMBER*	Max. DCL (μA) @		Max. IMP. @ - 55°C (Ohms)
				+ 25°C	+ 85°C + 125°C	
25 WVDC @ + 85°C . . . 15 WVDC @ + 125°C						
12.0	G2	20	285D126X0025G2	2.0	4.0	186
35.0	G3	20	285D356X0025G3	2.0	10.0	64
70.0	G4	20	285D706X0025G4	4.0	20.0	32
100.0	G5	20	285D107X0025G5	6.0	30.0	23
30 WVDC @ + 85°C . . . 20 WVDC @ + 125°C						
10.0	G2	20	285D106X0030G2	2.0	5.0	265
30.0	G3	20	285D306X0030G3	2.0	13.0	75
60.0	G4	20	285D606X0030G4	4.0	26.0	37
85.0	G5	20	285D856X0030G5	6.0	38.0	27
35 WVDC @ + 85°C . . . 25 WVDC @ + 125°C						
68.0	G5	20	285D686X0035G5	5.0	25.0	40
50 WVDC @ + 85°C . . . 30 WVDC @ + 125°C						
6.0	G2	20	285D605X0050G2	2.0	6.0	372
20.0	G3	20	285D206X0050G3	2.0	13.0	112
40.0	G4	20	285D406X0050G4	4.0	26.0	56
55.0	G5	20	285D556X0050G5	6.0	38.0	41
75 WVDC @ + 85°C . . . 50 WVDC @ + 125°C						
4.0	G2	20	285D405X0075G2	2.0	6.0	558
14.0	G3	20	285D146X0075G3	2.0	13.0	159
28.0	G4	20	285D286X0075G4	4.0	26.0	80
40.0	G5	20	285D406X0075G5	6.0	38.0	56
100 WVDC @ + 85°C . . . 65 WVDC @ + 125°C						
3.0	G2	20	285D305X0100G2	2.0	6.0	743
10.0	G3	20	285D106X0100G3	2.0	13.0	223
20.0	G4	20	285D206X0100G4	3.0	25.0	112
30.0	G5	20	285D306X0100G5	6.0	38.0	74
150 WVDC @ + 85°C . . . 100 WVDC @ + 125°C						
14.0	G4	20	285D146X0150G4	4.0	26.0	159
20.0	G5	20	285D206X0150G5	6.0	38.0	112
200 WVDC @ + 85°C . . . 150 WVDC @ + 125°C						
5.0	G3	15	285D505X0200G3	16.0	64.0	400
10.0	G4	15	285D106X0200G4	28.0	100.0	200
15.0	G5	15	285D156X0200G5	40.0	160.0	130
250 WVDC @ + 85°C . . . 165 WVDC @ + 125°C						
4.0	G3	15	285D405X0250G3	16.0	80.0	500
8.0	G4	15	285D805X0250G4	28.0	140.0	250
12.0	G5	15	285D126X0250G5	40.0	200.0	160
300 WVDC @ + 85°C . . . 200 WVDC @ + 125°C						
10.0	G5	15	285D106X0300G5	50.0	250.0	225

* Other Ratings Available. Non-Polar ratings available. Please consult factory.

Note: Dissipation Factor limits (maximum): 50 volts and below, - 20%; above 50 volts, -15%.

HOW TO ORDER				
285D	126	X0	250	G5
TYPE	CAPACITANCE	CAPACITANCE TOLERANCE	DC VOLTAGE RATING AT + 85°C	CASE CODE
	This is expressed in picofarads. The first two digits are the significant figures. The third is the number of zeros to follow.	X0 = $\pm$ 20% X9 = $\pm$ 10% X5 = $\pm$ 5%	This is expressed in volts. To complete the three-digit block, zeros precede the voltage rating.	See Ratings and Case Codes Table.
				0
				STYLE NUMBER
				0 = No outer tube. 2 = Outer polyester-film insulation.
Packaging: The use of formed plastic trays for packaging this type of axial lead component is standard. Tape and Reel is not recommended because of the unit weight and size.				