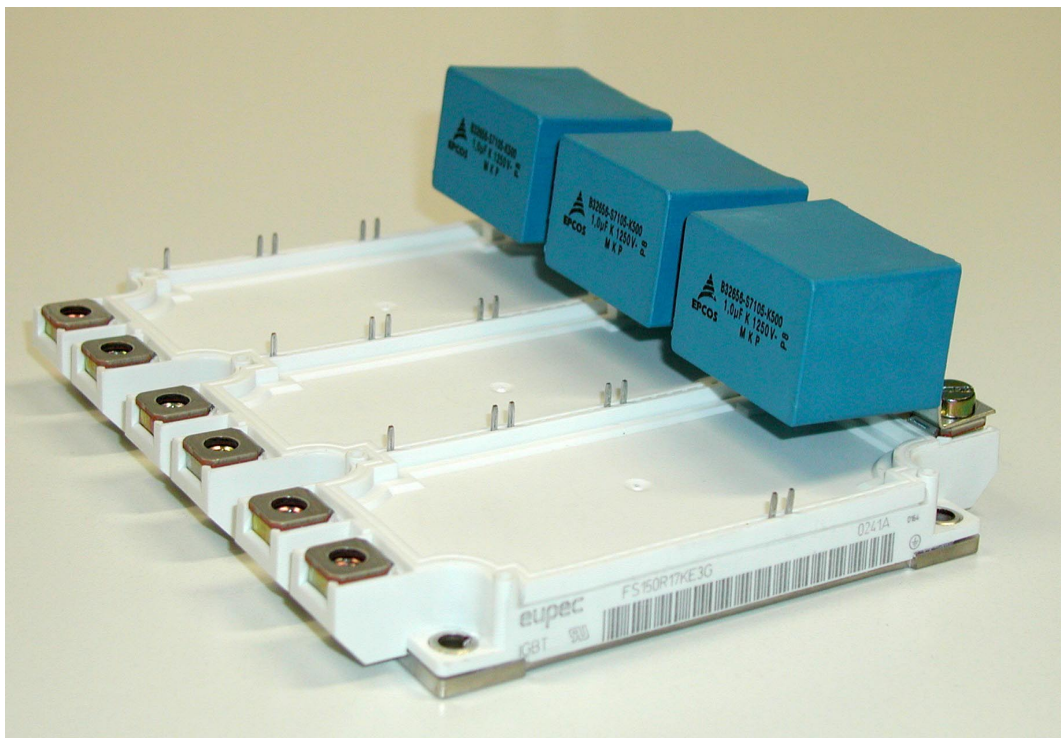


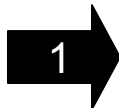
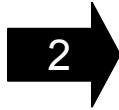
Cross Reference for IGBT Snubber Capacitors Module / Capacitors





Film Capacitor Division

IGBT Module / Capacitor Cross

USER GUIDE

<p>1 : Choose a modul</p>		<p><u>Modul / Terminal list</u></p> <p>Fuji</p> <p>Eupec eg.: FS225R12KE</p> <p>Semikron (1200V)</p>
<p>2 : Take a terminal no.</p>		<p>eg.: T5</p>

<p>3 : Choose a C-value</p>		<p><u>Capacitor list</u></p> <p>C value eg.: 0.47 μF</p>
<p>4 : Combine capacitor value, voltage and terminal</p>		<p>Voltage \geq module value</p> <p>eg.: 1200 V</p> <p>Terminal no. eg.: T5</p> <p>Box size eg.: 18x39,5x41,5</p>
<p>Remark:</p>		

if the desired terminal is not available in the requested voltage.
 --> Go for next higher voltage.

<p><u>EPCOS Ordering Code</u></p> <p>eg: T5 : B32656S7474K565</p>

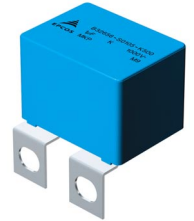


IGBT - Module List

MODUL DATA		Voltage				Data		Terminal configuration				Terminal (Capacitor) fitting on the Module									
MFGR	Type	600	1200	1400	1700	V	I	Case	Screw	Lead space	Dimensions	T1	T2	T3	T4	T5	T6	T7	T8		
						(V)	(A)	(mm)	(mm)	(mm)											
EUPEC	Half Bridge	BSM50GB60DLC				600	50	34mm	M5	23	94 x 34 x 30.5	T1	T2		T4	T5					
		BSM75GB60DLC				600	75	34mm	M5	23	94 x 34 x 30.5	T1	T2		T4	T5					
		BSM100GB60DLC				600	100	34mm	M5	23	94 x 34 x 30.5	T1	T2		T4	T5					
		BSM150GB60DLC				600	150	34mm	M5	23	94 x 34 x 30.5	T1	T2		T4	T5					
		BSM200GB60DLC				600	200	34mm	M5	23	94 x 34 x 30.5	T1	T2		T4	T5					
		BSM300GB60DLC				600	300	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4						
	Chopper						1200	25	34mm	M5	23	94 x 34 x 30.5	T1	T2		T4	T5				
							1200	50	34mm	M5	23	94 x 34 x 30.5	T1	T2		T4	T5				
							1200	75	34mm	M5	23	94 x 34 x 30.5	T1	T2		T4	T5				
							1200	75	34mm	M5	23	94 x 34 x 30.5	T1	T2		T4	T5				
							1200	100	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4					
							1200	100	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4					
							1200	150	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4					
							1200	150	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4					
							1200	200	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4					
							1200	200	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4					
							1200	100	34mm	M5	23	94 x 34 x 30.5	T1	T2		T4	T5				
							1200	150	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4					
							1200	200	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4					
							1200	300	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4					
							1200	300	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4					
							1200	200	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4					
							1200	200	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4					
							1200	300	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4					
							1200	300	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4					
		Half Bridge						1200	25	34mm	M5	23	94 x 34 x 30.5	T1	T2		T4	T5			
								1200	35	34mm	M5	23	94 x 34 x 30.5	T1	T2		T4	T5			
								1200	50	34mm	M5	23	94 x 34 x 30.5	T1	T2		T4	T5			
								1200	75	34mm	M5	23	94 x 34 x 30.5	T1	T2		T4	T5			
								1200	75	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4				
							1200	100	34mm	M5	23	94x34x30.5	T1	T2		T4	T5				
							1200	100	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4					
							1200	150	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4					
						1200	200	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4						
						1200	35	34mm	M5	23	94 x 34 x 30.5	T1	T2		T4	T5					
						1200	50	34mm	M5	23	94 x 34 x 30.5	T1	T2		T4	T5					
						1200	75	34mm	M5	23	94 x 34 x 30.5	T1	T2		T4	T5					
						1200	100	34mm	M5	23	94 x 34 x 30.5	T1	T2		T4	T5					
						1200	100	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4						
						1200	150	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4						
						1200	200	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4						
						1200	300	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4						
						1200	150	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4						
						1200	150	62mm	M5	28	6.4 x 61.4 x 30.5	T1			T4						
						1200	200	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4						
						1200	200	62mm	M5	28	6.4 x 61.4 x 30.5	T1			T4						
						1200	300	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4						
						1200	400	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4						
						1200	400	62mm	M5	28	6.4 x 61.4 x 30.5	T1			T4						
						1200	100	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4						
						1200	150	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4						
						1200	150	62mm	M5	28	6.4 x 61.4 x 30.5	T1			T4						
						1200	200	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4						
						1200	300	62mm	M6	28	6.4 x 61.4 x 30.5	T1			T4						

IGBT - Module List

MODUL DATA		Voltage				Data		Terminal configuration			Terminal (Capacitor) fitting on the Module										
MFGR	Type	600	1200	1400	1700	V	I (A)	Case	Screw Lead	Dimensions	T1	T2	T3	T4	T5	T6	T7	T8			
						(V)	(A)	(mm)	(mm)	(mm)											
TOSHIBA	IGBT Plus 2-109C1A 2-95A1A		MG 50 Q2Y S50 MG 75 Q2Y S50 MG 100 Q2Y S51 MG 100 Q2Y S50 MG 150 Q2Y S51 MG 150 Q2Y S50 MG 200 Q2Y S50 MG 300 Q2Y S50			1200	50	33	M5	23	93.5 x 35 x 32	T1	T2		T4	T5					
						1200	75	33	M5	23	93.5 x 35 x 32	T1	T2		T4	T5					
						1200	100	35	M5	28	108 x 62 x 35	T1			T4						
						1200	100	36	M5	23	94 x 48 x 29.7	T1	T2		T4	T5					
						1200	150	35	M5	28	108 x 62 x 35	T1			T4						
						1200	150	36	M5	23	94 x 48 x 29.7	T1	T2		T4	T5					
						1200	200	35	M5	28	108 x 62 x 35	T1			T4						
						1200	300	35	M5	28	108 x 62 x 35	T1			T4						
		MG 50 Q1Z S50 MG 75 Q1Z S50 MG 100 Q1Z S50					600	50	9	M5	23	93.5 x 35 x 32	T1	T2		T4	T5				
							600	75	9	M5	23	93.5 x 35 x 32	T1	T2		T4	T5				
							600	100	8	M5	23	94 x 48 x 29.7	T1	T2		T4	T5				
		MG 50 J2Y S50 MG 75 J2Y S50 MG 100 J2Y S50 MG 150 J2Y S50 MG 200 J2Y S50 MG 300 J2Y S50					600	50	33	M5	23	93.5 x 35 x 32	T1	T2		T4	T5				
							600	75	33	M5	23	93.5 x 35 x 32	T1	T2		T4	T5				
							600	100	33	M5	23	93.5 x 35 x 32	T1	T2		T4	T5				
							600	150	36	M5	23	94 x 48 x 29.7	T1	T2		T4	T5				
							600	200	36	M5	23	94 x 48 x 29.7	T1	T2		T4	T5				
							600	300	35	M5	28	108 x 62 x 35	T1			T4					
			MG 25 Q2Y S40 MG 50 Q2Y S40 MG 75 Q2Y S40 MG 100 Q2Y S42 MG 150 Q2Y S40 MG 200 Q2Y S40				1200	25	33	M5	23	93.5 x 35 x 32	T1	T2		T4	T5				
							1200	50	33	M5	23	93.5 x 35 x 32	T1	T2		T4	T5				
							1200	75	33	M5	23	93.5 x 35 x 32	T1	T2		T4	T5				
							1200	100	35	M5	28	108 x 62 x 35	T1			T4					
							1200	150	35	M5	28	108 x 62 x 35	T1			T4					
							1200	200	35	M5	28	108 x 62 x 35	T1			T4					
							1700	30	33	M5	23	93.5 x 35 x 32	T1	T2		T4	T5				
							1700	90	35	M5	28	108 x 62 x 35	T1			T4					
							1700	120	35	M5	28	108 x 62 x 35	T1			T4					
	MITSUBISHI	Singl U-pack	CM 75 DU-12H CM 75 DU-12F CM 100 DU-12H CM 100 DU-12F CM 150 DU-12H CM 150 DU-12F CM 200 DU-12H CM 200 DU-12F CM 300 DU-12H CM 300 DU-12F CM 400 DU-12F				600	75	D	M5	23	94 x 48 x 30	T1	T2		T4	T5				
							600	75	D	M5	23	94 x 48 x 30	T1	T2		T4	T5				
600							100	D	M5	23	94 x 48 x 30	T1	T2		T4	T5					
600							100	D	M5	23	94 x 48 x 30	T1	T2		T4	T5					
600							150	D	M5	23	94 x 48 x 30	T1	T2		T4	T5					
600							150	D	M5	23	94 x 48 x 30	T1	T2		T4	T5					
600							200	D	M5	23	94 x 48 x 30	T1	T2		T4	T5					
600							200	D	M6	25	108 x 62 x 29	T1			T4						
600							300	D	M6	25	108 x 62 x 29	T1			T4						
600							300	D	M6	25	108 x 62 x 29	T1			T4						
600							400	D	M6	25	108 x 62 x 29	T1			T4						
4 pack							CM 75 BU-12H CM 100 BU-12H					600	75	B	M4	20	91 x 72 x 26		T2		T5
		600	100	B	M4	20						91 x 72 x 26		T2		T5					
		6 pack	CM 75 TU-12H CM 75 TU-12F CM 100 TU-12H CM 100 TU-12F CM 150 TU-12H CM 150 TU-12F CM 200 TU-12H CM 200 TU-12F					600	75	T	M4	20	102 x 91 x 26		T2		T5				
								600	75	T	M4	20	102 x 91 x 26		T2		T5				
								600	100	T	M4	20	102 x 91 x 26		T2		T5				
								600	100	T	M4	20	102 x 91 x 26		T2		T5				
								600	150	T	M5	23	107 x 102 x 86	T1	T2		T4	T5			
								600	150	T	M5	23	107 x 102 x 86	T1	T2		T4	T5			
Dual		CM 50 DY-12H CM 75 DY-12H CM 100 DY-12H CM 150 DY-12H CM 200 DY-12H CM 300 DY-12H CM 400 DY-12H					600	50	D	M5	23	94 x 34 x 31	T1	T2		T4	T5				
							600	75	D	M5	23	94 x 34 x 31	T1	T2		T4	T5				
							600	100	D	M5	23	94 x 34 x 31	T1	T2		T4	T5				
							600	150	D	M5	23	94 x 34 x 31	T1	T2		T4	T5				
							600	200	D	M5	23	94 x 34 x 31	T1	T2		T4	T5				
							600	300	D	M5	23	94 x 34 x 31	T1	T2		T4	T5				
							600	400	D	M6	25	108 x 62 x 31	T1			T4					



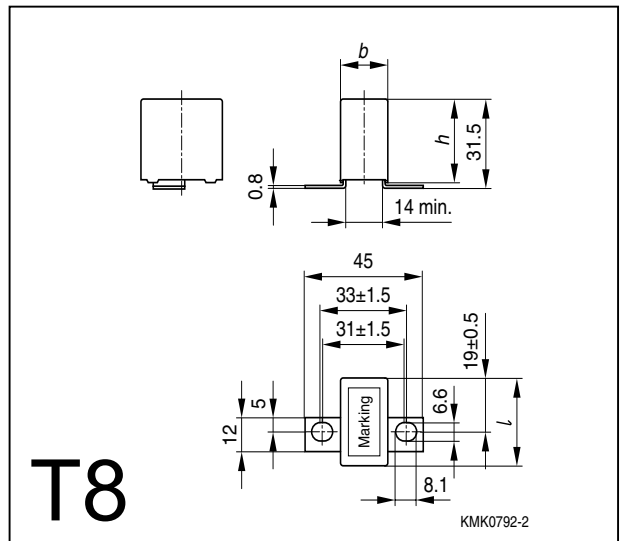
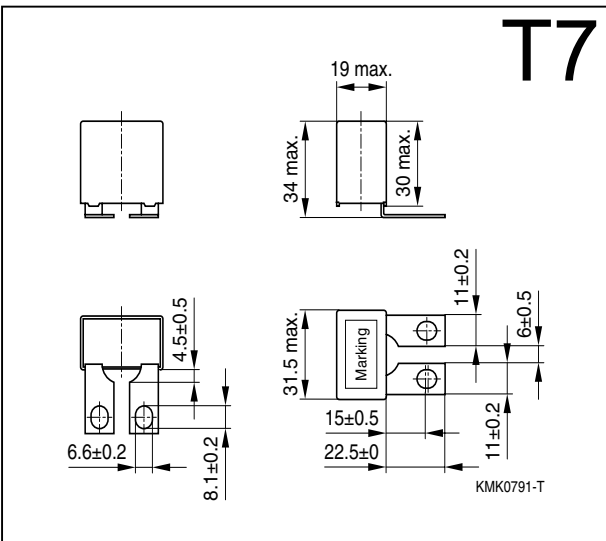
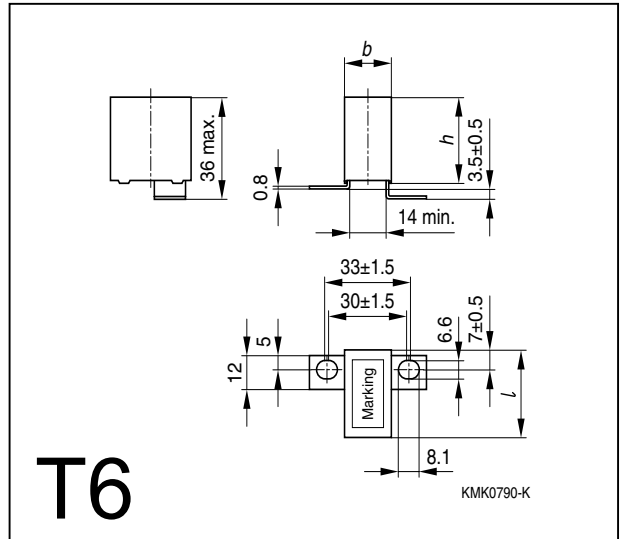
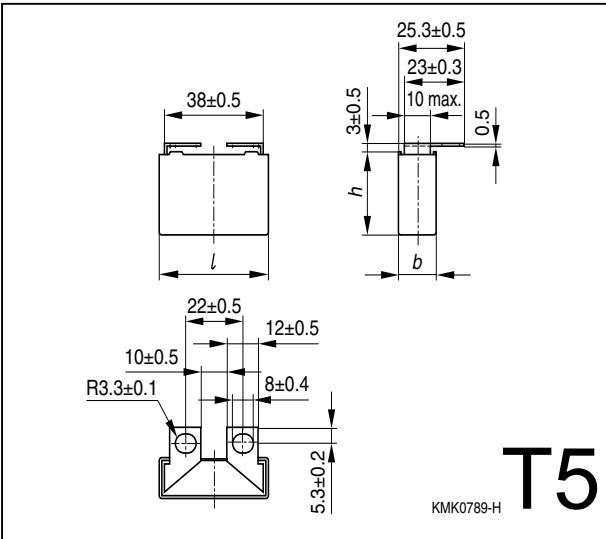
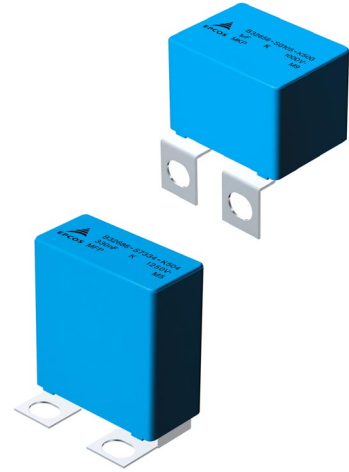
IGBT Capacitors List (MKP)

VALUE (uF)	VOLTAGES MKP					ESR (mΩ)	I _{rms} (A)	EPCOS ORDERING CODE	FLAT TERMINALS available												
	b x h x l								T1 T2 T3 T4 T5 T6 T7 T8												
	DC/AC	850/450	1000/480	1250/500	1600/750				2000/800												
du/dt	400	450	500	600	700																
0.047					12x22,5x41,5	35	5	B32656S2473+													
0.068					14x25x41,5	25	6	B32656S2683+				563	564	565							
				12x22,5x41,5					B32656S1683+				563								
0.10					14x25x41,5	20	7	B32656S2104+				563	564	565							
				12x22,5x41,5					B32656S1104+				563								
0.12					16x28,5x41,5	15	7	B32656S2124+				563	564	565							
				12x22,5x41,5					B32656S1124+				563	564	565						
				14x25x41,5					B32656S7124+				563								
0.15					16x28,5x41,5	15	8	B32656S2154+				563	564	565							
				12x22,5x41,5					B32656S1154+				563	564	565						
				14x25x41,5					B32656S7154+				563								
0.22					20x39,5x41,5	14	10	B32656S7224+							566	567	568				
				19,0x30,0x31,5					B32656S2224+	561	562	563	564	565							
				14x25x41,5					B32656S1224+				563	564	565						
				16x28,5x41,5					B32656S7224+				563	564	565						
				12x22,5x41,5					B32656S0224+				563								
0.27					28x37x42	9	11	B32656S8224+				563									
				18x32,5x41,5					B32656S2274+	561	562	563									
				14x25x41,5					B32656S1274+				563	564	565						
				12x22,5x41,5					B32656S7274+				563	564	565						
				12x22,5x41,5					B32656S0274+				563								
0.33					28x37x42	9	12	B32656S8274+				563									
				20x39,5x41,5					B32656S2334+	561	562	563									
				16x28,5x41,5					B32656S1334+	561	562	563	564	565							
				14x25x41,5					B32656S7334+				563	564	565						
				12x22,5x41,5					B32656S0334+				563	564	565						
0.39					30x45x42	8	13	B32656S8334+				563									
				18x32,5x41,5					B32656S2394+	561	562	563									
				14x25x41,5					B32656S1394+	561	562	563									
				12x22,5x41,5					B32656S7394+				563	564	565						
				12x22,5x41,5					B32656S0394+				563	564	565						
0.47					30x45x42	20	8	B32656S8394+				563									
				19,0x30,0x31,5					B32656S2474+	561	562	563									
				18x32,5x41,5					B32656S1474+	561	562	563									
				16x28,5x41,5					B32656S7474+				563	564	565						
				12x22,5x41,5					B32656S0474+				563	564	565						
0.56					30x45x42	7	13	B32656S8474+				563									
				20x39,5x41,5					B32656S1564+	561	562	563									
				14x25x41,5					B32656S7564+	561	562	563	564	565							
				16x28,5x41,5					B32656S0564+				563	564	565						
				12x22,5x41,5					B32656S8564+				563	564	565						
0.68					30x45x42	6	14	B32656S8564+				563									
				20x39,5x41,5					B32656S1684+	561	562	563									
				18x32,5x41,5					B32656S7684+	561	562	563	564	565							
				16x28,5x41,5					B32656S0684+				563	564	565						
				12x22,5x41,5					B32656S8684+				563	564	565						
0.75					28x37x42	6	10	B32656S8684+				563									
				18x32,5x41,5					B32656S7754+	561	562	563									
				16x28,5x41,5					B32656S0754+				563	564	565						
0.82					28x37x42	6	11	B32656S8754+				563									
				18x32,5x41,5					B32656S7824+	561	562	563									
				16x28,5x41,5					B32656S0824+				563	564	565						
1.00					28x37x42	6	12	B32656S8824+				563	564	565							
				20x39,5x41,5					B32656S7105+	561	562	563									
				18x32,5x41,5					B32656S0105+	561	562	563	564	565							
1.20					30x45x42	5	14	B32656S8105+				563	564	565							
				20x39,5x41,5					B32656S7125+	561	562	563									
				18x32,5x41,5					B32656S0125+	561	562	563	564	565							
1.40					30x45x42	5	15	B32656S8125+				563	564	565							
				28x37x42					B32656S7145+	561	562	563									
				20x39,5x41,5					B32656S0145+	561	562	563									
1.50					30x45x42	5	15	B32656S8145+	561	562	563	564	565								
				31x26,5x43,5					B32656S0155+	561	562	563									
1.80					30x45x42	4,5	16	B32656S8155+	561	562	563										
				28x37x42					B32656S0185+	561	562	563									
2.0					30x45x42	4	17	B32656S8185+	561	562	563										
				28x37x42					B32656S0205+	561	562	563									
2.20					30x45x42	3,5	17	B32656S8205+	561	562	563										
2.50				30x45x42					B32656S0225+	561	562	563									
						3	18	B32656S8255+	561	562	563										

Kapazitätstoleranz(+): +/- 20% = M, +/- 10% = K, +/- 5% = J
Terminal(**): T1 = 561 ... T8 = 568

IGBT Terminal

(Versions Available)



Special layouts upon request

		Lead space	Boxes									
Terminal	Code	(mm)	b x h x l	b x h x l	b x h x l	b x h x l	b x h x l	b x h x l	b x h x l	b x h x l	b x h x l	
T1	561	23 - 28	20 x 39.5 x 41.5	28 x 37 x 42	30 x 45 x 42							
T2	562	19 - 24	20 x 39.5 x 41.5	28 x 37 x 42	30 x 45 x 42							
T3	563	57	12 x 22.5 x 41.5	14 x 25 x 41.5	16 x 28.5 x 41.5	18 x 32.5 x 41.5	20 x 39.5 x 41.5	28 x 37 x 42	30 x 45 x 42	31 x 26 x 43.6		
T4	564	23 - 28	14 x 25 x 41.5	16 x 28.5 x 41.5	18 x 32.5 x 41.5	20 x 39.5 x 41.5						
T5	565	20 - 24	14 x 25 x 41.5	16 x 28.5 x 41.5	18 x 32.5 x 41.5	20 x 39.5 x 41.5						
T6	566	30 - 33	19 x 30 x 32									
T7	567	17 - 18	19 x 30 x 32									
T8	568	31 - 33	19 x 30 x 32									
T9	569	25	18 x 32.5 x 41.5	20 x 39.5 x 41.5								

IGBT - Capacitor Questionnaire

Please fill in your requirements:

Application:

Start of production:

Quantity / year:

Module:

Mfgr:

Voltage:

Current:

Lead space:

Screw diameter:

Capacitor:

Lead space:

Dimensions:

Capacitance value:

Tolerance:

Voltage (Vdc):

Voltage (Vac):

Current (A):

dv/dt:

Switching frequency:

Load diagramm: if available (curve forms)
or your specification...