



Classification	Series	Page	Features	Small size · Low profile	Large capacitance	Low ESR	For automotive	High voltage	Size code	Category temperature range (°C)	Rated voltage range (V.DC)	Capacitance range (μF)	L×W (mm)	H (mm)
SMD type	TPU	81	Small size Low profile Face down terminal	●					S09	-55 to +85	2.5 to 10	4.7 to 100	2.0×1.25	0.9
									B09	-55 to +85	6.3	150	3.5×2.8	0.9
	TPH	82	Small size Low ESR Face down terminal	●		●			A09	-55 to +85	2.5 to 10	33 to 100	3.2×1.6	0.9
								A14	-55 to +85	2.5 to 6.3	100 to 220	3.2×1.6	1.4	
	TPG	83	Small size Low profile Large capacitance	●	●				B1G	-55 to +105	2.5 to 12.5	33 to 220	3.5×2.8	1.1
								B15G	-55 to +105	4.0 to 6.3	150 to 220	3.5×2.8	1.4	
	TPSF	84	Low ESR · Small size Large capacitance Face down terminal	●	●	●			B1S	-55 to +105	2.5	200	3.5×2.8	1.1
								B2S	-55 to +105	2.0 to 2.5	270	3.5×2.8	1.9	
	TPE	85 to 88	Low ESR				●		B2	-55 to +105	2.0 to 10	47 to 470	3.5×2.8	1.9
								D15E	-55 to +105	6.3	470	7.3×4.3	1.4	
								D2E	-55 to +105	2.5 to 10	68 to 470	7.3×4.3	1.8	
								D3L	-55 to +105	2.5 to 10	220 to 680	7.3×4.3	2.8	
								D4	-55 to +105	2.5 to 10	330 to 1,500	7.3×4.3	3.8	
	TPB	89 to 90	Standard						B2	-55 to +105	4.0 to 10	33 to 68	3.5×2.8	1.9
							D3L	-55 to +105	4.0 to 10	150 to 330	7.3×4.3	2.8		
							D4	-55 to +105	6.3 to 10	220 to 470	7.3×4.3	3.8		
TPC	91 to 92	Low profile	●					B1	-55 to +105	6.3 to 12.5	10 to 47	3.5×2.8	1.1	
							D2	-55 to +105	6.3 to 10	68 to 330	7.3×4.3	1.9		

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SMD type	TPF	93 to 94	Low ESR Large capacitance		●	●			D2E	-55 to +105	2.0	220 to 330	7.3×4.3	1.8	
									D3L	-55 to +105	2.5 to 10	150 to 680	7.3×4.3	2.8	
										D4	-55 to +105	2.5 to 6.3	470 to 1,000	7.3×4.3	3.8
	TA	95	High reliability (for the car electronics)					●	B2	-55 to +105	4.0 to 10	47 to 100	3.5×2.8	1.9	
									D2E	-55 to +105	2.5 to 10	68 to 470	7.3×4.3	1.8	
										D3L	-55 to +105	2.5 to 10	150 to 680	7.3×4.3	2.8
	TV	96	High reliability Guaranteed at 125°C (for the car electronics)					●	D2E	-55 to +125	6.3 to 10	68 to 150	7.3×4.3	1.8	
									D3L	-55 to +125	10	150	7.3×4.3	2.8	
	TH	97 to 98	Guaranteed at 125°C						D2E	-55 to +125	2.5 to 6.3	150 to 330	7.3×4.3	1.8	
									D2	-55 to +125	2.5 to 10	68 to 220	7.3×4.3	1.9	
										D3L	-55 to +125	4.0 to 6.3	220 to 330	7.3×4.3	2.8
										D4	-55 to +125	4.0 to 10	220 to 470	7.3×4.3	3.8
	TQC	99 to 100	High voltage						B15	-55 to +105	35	2.7	3.5×2.8	1.4	
									B2	-55 to +105	16 to 35	3.9 to 22	3.5×2.8	1.9	
								●	D12	-55 to +105	16	33	7.3×4.3	1.15	
								D15	-55 to +105	16 to 25	22 to 47	7.3×4.3	1.4		
								D2	-55 to +105	16 to 35	10 to 100	7.3×4.3	1.9		
									D3L	-55 to +105	16 to 20	100 to 150	7.3×4.3	2.8	