



**SW** SERIES

**NSX** SERIES

**SWZ** SERIES



**◆ FEATURES**

- SW:High Capacitance,Low ESR
- SWZ:High Capacitance,Ultra Low ESR
- NSX:C case
- RoHS Compliance
- Lead free reflow soldering is available  
(260°C,10sec):(Available for MSL3)

**◆ SPECIFICATIONS**

Series	SW		SWZ	NSX
	2.7mm	2.9mm	1.9mm	
Temperature Range(°C)	-55~+105°C			
Rated Voltage Range(V.DC)	2~8	2~6.3	2~6.3	2~6.3
Rated Cap Range(μF)	33~220	120~470	120~330	47~100
Capacitance Tolerance(20°C/120Hz)	± 20%			
Leakage Current(after 5 minutes)(μA)	≤ 0.04CV			
(Tanδ) Dissipation Factor(20°C/120Hz)	≤ 0.1		≤ 0.05	
Equivalent Series Resistance(ESR) (mΩ)(20°C/100kHz)	≤ 9 ≤ 13,18(8V)	≤ 9	4.5~15	12(2,2.5V) 18(4,6.3V)
Maximum Permissible Ripple Current(mA r.m.s)(100kHz)	3,500 2,500(8V)		2,700~3,500	2,200
Surge Voltage	Rated voltage X1.25			
Endurance (105°C, 2000hrs, Rated Voltage applied)	Δ C	Within ±20% of the initial value		
	Tanδ	≤ 150% of initial specified value		≤ 200% of initial specified value
	LC	≤ initial specified value		
Damp heat(Steady state) (60°C, 90%RH, 500hrs, No-applied voltage)	Δ C	Within -20%~+40% of the initial value		Within -20%~+60% of the initial value
	Tanδ	≤ 150% of initial specified value		≤ 200% of initial specified value
	LC	≤ 300% of initial specified value		

**◆ STANDARD SIZE**

Series	WV(V.DC)	Cap( $\mu$ F)	Size(mm)			(m $\Omega$ )	(mAr.m.s)	Part No.
			L	W	H			
SW	2	220	7.3	4.3	2.7	9	3,500	2SW220M
		270	7.3	4.3	2.9	9	3,500	2SW270M
		330	7.3	4.3	2.9	9	3,500	2SW330M
		390	7.3	4.3	2.9	9	3,500	2SW390M
		470	7.3	4.3	2.9	9	3,500	2SW470M
	2.5	180	7.3	4.3	2.7	9	3,500	2.5SW180M
		220	7.3	4.3	2.9	9	3,500	2.5SW220M
		270	7.3	4.3	2.9	9	3,500	2.5SW270M
		330	7.3	4.3	2.9	9	3,500	2.5SW330M
	4	150	7.3	4.3	2.7	9	3,500	4SW150M
		180	7.3	4.3	2.9	9	3,500	4SW180M
		220	7.3	4.3	2.9	9	3,500	4SW220M
		270	7.3	4.3	2.9	9	3,500	4SW270M
	6.3	100	7.3	4.3	2.7	9	3,500	6SW100M
		120	7.3	4.3	2.9	9	3,500	6SW120M
		150	7.3	4.3	2.9	9	3,500	6SW150M
		180	7.3	4.3	2.9	9	3,500	6SW180M
	8	33	7.3	4.3	2.7	13	2,500	8SW33M
		68	7.3	4.3	2.7	18	2,500	8SW68M
		100	7.3	4.3	2.7	18	2,500	8SW100M
SWZ	2	270	7.3	4.3	1.9	9	3,000	2SWZ270M R09
		270	7.3	4.3	1.9	6	3,500	2SWZ270M R06
		330	7.3	4.3	1.9	15	2,700	2SWZ330M R15
		330	7.3	4.3	1.9	9	3,000	2SWZ330M R09
		330	7.3	4.3	1.9	6	3,500	2SWZ330M R06
		330	7.3	4.3	1.9	4.5	3,500	2SWZ330M R05
	2.5	220	7.3	4.3	1.9	9	3,000	2.5SWZ220M R09
		220	7.3	4.3	1.9	6	3,500	2.5SWZ220M R06
		270	7.3	4.3	1.9	9	3,000	2.5SWZ270M R09
		270	7.3	4.3	1.9	6	3,500	2.5SWZ270M R06
	4	180	7.3	4.3	1.9	9	3,000	4SWZ180M R09
		220	7.3	4.3	1.9	9	3,000	4SWZ220M R09
	6.3	120	7.3	4.3	1.9	9	3,000	6SWZ120M R09
		150	7.3	4.3	1.9	15	2,700	6SWZ150M R15
		150	7.3	4.3	1.9	9	3,000	6SWZ150M R09
NSX	2	100	6.0	3.2	1.9	12	2,200	2NSX100M
	2.5	82	6.0	3.2	1.9	12	2,200	2.5NSX82M
	4	68	6.0	3.2	1.9	18	2,200	4NSX68M
	6.3	47	6.0	3.2	1.9	18	2,200	6NSX47M