



APOLLO SEMICONDUCTOR

Selection Guide

Q2 2022

V5.9

MOSFET



MOSFET Selection Guide



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- **N-Channel Enhancement Mode MOSFET**

- **$V_{DS} = 20V \sim 25V$**

Apollo Part Number	Package	Status	Configuration	Polarity	VDS (V)	VGS ($\pm V$)	ID (A)	PD (W)	RDS(ON) (m Ω max) at VGS=			
							25°C	25°C	10V	4.5V	2.5V	1.8V
AP2300A	SOT23 (TO236)	Active	Single	N	20	10	5	1.25		25	35	55
AP2300B	SOT23-3	Active	Single	N	20	10	5	1.25		25	35	55
AP2302A	SOT23 (TO236)	Active	Single	N	20	8	2.8	1.25		85	115	
AP2302B	SOT23-3	Active	Single	N	20	8	2.8	1.25		85	115	
AP2310A	SOT23 (TO236)	Active	Single	N	20	10	6.5	1.3		22	30	
AP2310B	SOT23-3	Active	Single	N	20	10	6.5	1.3		22	30	
AP3414A	SOT23 (TO236)	Active	Single	N	20	8	4.2	1.4		50	63	87
AP3414B	SOT23-3	Active	Single	N	20	8	4.2	1.4		50	63	87
AP4402	SOP-8	Active	Single	N	20	12	20	3.1		5.5	7	
AP8205A	TSSOP-8	Active	Dual	N + N	20	10	6.5	2		25	29	
AP8205T	SOT23-6 (SOT163) / TSOP6	Active	Dual	N + N	20	12	4.3	1.25			46	
AP8810DY	SOP-8	Active	Dual	N + N	20	8	7	1.25		20	30	50
AP8810T	SOT23-6 (SOT163) / TSOP6	Active	Dual	N + N	20	8	7	1.5		20	30	50
APFDV303N (New!)	SOT23 (TO236)	Active	Single	N	25	8	0.68	0.35		450		

- **N-Channel Enhancement Mode MOSFET**

- **$V_{DS} = 30V$**

Apollo Part Number	Package	Status	Configuration	Polarity	VDS (V)	VGS ($\pm V$)	ID (A)	PD (W)	RDS(ON) (m Ω max) at VGS=			
							25°C	25°C	10V	4.5V	2.5V	1.8V
AP2300A-SI	SOT23 (TO236)	Active	Single	N	30	12	4	1.4	55	70	110	
AP2300B-SI	SOT23-3	Active	Single	N	30	12	4	1.4	55	70	110	
AP2300A-SI-2	SOT23 (TO236)	Active	Single	N	30	12	3.8	1.4	55	65	85	
AP2300B-SI-2	SOT23-3	Active	Single	N	30	12	3.8	1.4	55	65	85	
AP2304A	SOT23 (TO236)	Active	Single	N	30	20	2.5	1.25	117	190		
AP2304B	SOT23-3	Active	Single	N	30	20	2.5	1.25	117	190		
AP2306A	SOT23 (TO236)	Active	Single	N	30	20	3.5	1.25	57	94		
AP2306B	SOT23-3	Active	Single	N	30	20	3.5	1.25	57	94		
AP2366A	SOT23 (TO236)	Active	Single	N	30	20	5.8	2.1	36	42		
AP2366B	SOT23-3	Active	Single	N	30	20	5.8	2.1	36	42		
AP3400A	SOT23 (TO236)	Active	Single	N	30	12	5.8	1.4	28	33	52	
AP3400B	SOT23-3	Active	Single	N	30	12	5.8	1.4	28	33	52	

- **N-Channel Enhancement Mode MOSFET**

- **$V_{DS} = 30V$**

Apollo Part Number	Package	Status	Configuration	Polarity	VDS (V)	VGS ($\pm V$)	ID (A)	PD (W)	RDS(ON) (m Ω max) at VGS=			
							25°C	25°C	10V	4.5V	2.5V	1.8V
AP3402A	SOT23 (TO236)	Active	Single	N	30	12	4	1.4	55	70	110	
AP3402B	SOT23-3	Active	Single	N	30	12	4	1.4	55	70	110	
AP3404A	SOT23 (TO236)	Active	Single	N	30	20	5.8	1.4	28	43		
AP3404B	SOT23-3	Active	Single	N	30	20	5.8	1.4	28	43		
AP3406A	SOT23 (TO236)	Active	Single	N	30	20	3.6	1.4	50	70		
AP3406B	SOT23-3	Active	Single	N	30	20	3.6	1.4	50	70		
AP3410A	SOT23 (TO236)	Active	Single	N	30	12	5.8	1.4	28	33	42	72
AP3410B	SOT23-3	Active	Single	N	30	12	5.8	1.4	28	33	42	72
AP3418A	SOT23 (TO236)	Active	Single	N	30	12	3.8	1.4	55	65	85	
AP3418B	SOT23-3	Active	Single	N	30	12	3.8	1.4	55	65	85	
AP4410	SOP-8	Active	Single	N	30	12	18	3.1	5.5	6.2		
APN6512	DFN5x6-8 (PDFNWB5x6-8L)	Active	Single	N	30	20	150	83	1.7	2.4		
APN6516	DFN5x6-8 (PDFNWB5x6-8L)	Active	Single	N	30	20	32	25	5	8		

- **N-Channel Enhancement Mode MOSFET**

- **$V_{DS} = 40V \sim 100V$**

Apollo Part Number	Package	Status	Configuration	Polarity	VDS (V)	VGS ($\pm V$)	ID (A)	PD (W)	RDS(ON) (m Ω max) at VGS=			
							25°C	25°C	10V	4.5V	2.5V	1.8V
2N7002	SOT23 (TO236)	Active	Single	N	60		0.115	0.225	7500			
AP2308A	SOT23 (TO236)	Active	Single	N	60	20	2	1.25	160	220		
AP2308B	SOT23-3	Active	Single	N	60	20	2	1.25	160	220		
AP3422A (New!)	SOT23 (TO236)	Active	Single	N	55	12	2.1	1.25		160	200	
AP3422B (New!)	SOT23-3	Active	Single	N	55	12	2.1	1.25		160	200	
AP4480 (New!)	SOP-8	Active	Single	N	40	20	14	3.1	11.5	15.5		
AP4892	SOP-8	Active	Dual	N + N	100	20	4	2	68	94		
APLML0060B (New!)	SOT23-3	Active	Single	N	60	20	3.7	1.4	100	120		
APN5C430NLT3G (New!)	DFN5x6-8 (PDFNWB5x6-8L)	Active	Single	N	40	20	200	92.6	1.4			
APN2392	DFN 2x2C	Active	Single	N	100	20	8	4.1	32	39		
APN6014LT3G (New!)	DFN5x6-8 (PDFNWB5x6-8L)	Active	Single	N	60	20	95	120	2.5	3.4		

- **P-Channel Enhancement Mode MOSFET**

- **$V_{DS} = -20V \sim -8V$**

Apollo Part Number	Package	Status	Configuration	Polarity	VDS (V)	VGS ($\pm V$)	ID (A)	PD (W)	RDS(ON) (m Ω max) at VGS=			
							25°C	25°C	10V	4.5V	2.5V	1.8V
AP2301A	SOT23 (TO236)	Active	Single	P	-20	8	-2.2	0.7		100	150	
AP2301B	SOT23-3	Active	Single	P	-20	8	-2.2	0.7		100	150	
AP2305A	SOT23 (TO236)	Obsolete	Single	P	-8	8	-3.5	1.25		52	71	108
AP2305B	SOT23-3	Obsolete	Single	P	-8	8	-3.5	1.25		52	71	108
AP3419A	SOT23 (TO236)	Active	Single	P	-20	12	-3.5	1.4	75	95	145	
AP3419B	SOT23-3	Active	Single	P	-20	12	-3.5	1.4	75	95	145	
AP4151	SOT-523	Active	Single	P	-20	6	0.76			260	350	490

- **P-Channel Enhancement Mode MOSFET**

- **$V_{DS} = -30V$**

Apollo Part Number	Package	Status	Configuration	Polarity	VDS (V)	VGS ($\pm V$)	ID (A)	PD (W)	RDS(ON) (m Ω max) at VGS=			
							25°C	25°C	10V	4.5V	2.5V	1.8V
AP2303A	SOT23 (TO236)	Active	Single	P	-30	20	-1.4	0.7	200	380		
AP2303B	SOT23-3	Active	Single	P	-30	20	-1.7	1.25	200	380		
AP2307A	SOT23 (TO236)	Active	Single	P	-30	20	-3	1.25	80	140		
AP2307B	SOT23-3	Active	Single	P	-30	20	-3	1.25	80	140		
AP3401A	SOT23 (TO236)	Active	Single	P	-30	12	-4.2	1.4	50	65	120	
AP3401B	SOT23-3	Active	Single	P	-30	12	-4.2	1.4	50	65	120	
AP3403A	SOT23 (TO236)	Active	Single	P	-30	12	-2.6	1.4	115	150	200	
AP3403B	SOT23-3	Active	Single	P	-30	12	-2.6	1.4	115	150	200	
AP3407A	SOT23 (TO236)	Active	Single	P	-30	20	-4.1	1.4	52	87		
AP3407B	SOT23-3	Active	Single	P	-30	20	-4.1	1.4	52	87		

- **P-Channel Enhancement Mode MOSFET**

- **$V_{DS} = -30V$**

Apollo Part Number	Package	Status	Configuration	Polarity	VDS (V)	VGS ($\pm V$)	ID (A)	PD (W)	RDS(ON) (m Ω max) at VGS=			
							25°C	25°C	10V	4.5V	2.5V	1.8V
AP3409A	SOT23 (TO236)	Active	Single	P	-30	20	-2.6	1.4	130	200		
AP3409B	SOT23-3	Active	Single	P	-30	20	-2.6	1.4	130	200		
AP4403	SOP-8	Active	Single	P	-30	12	-6	3.1	48	57	80	
AP4407	SOP-8	Active	Single	P	-30	25	-12	3.1	14			
AP4409	SOP-8	Active	Single	P	-30	20	-15	3.1	7.5	12		
AP4411	SOP-8	Active	Single	P	-30	20	-8	3.1	32	55		
AP4435DY	SOP-8	Active	Single	P	-30	20	-8.8	2.5	20	35		
AP4459	SOP-8	Active	Single	P	-30	20	-6.5	3.1	46	72		
AP4953DY	SOP-8	Active	Dual	P + P	-30	20	-4.9	2	53	95		
AP6405	SOT23-6 (SOT163) / TSOP6	Life Time Buy	Single	P	-30	20	5	2	52	87		
AP9435DY	SOP-8	Active	Single	P	-30	20	-5.3	2.5	50	80		

- **P-Channel Enhancement Mode MOSFET**

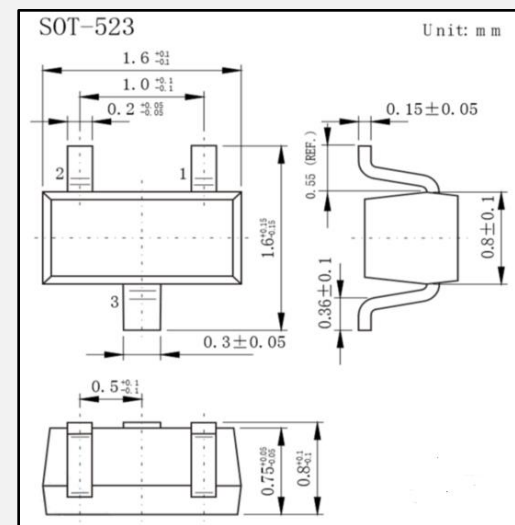
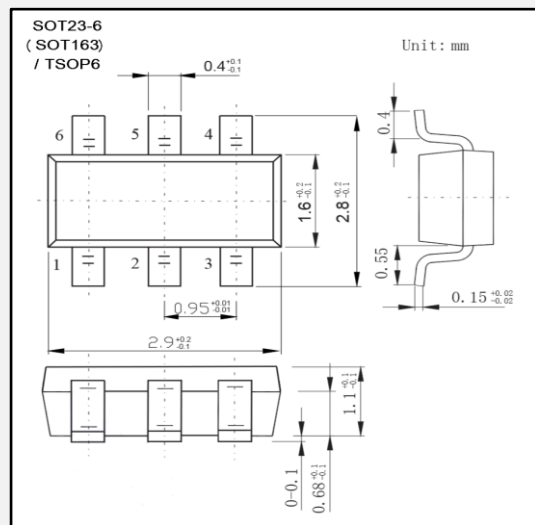
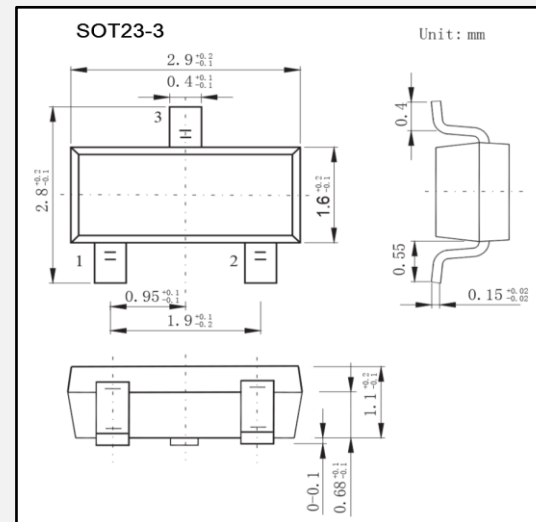
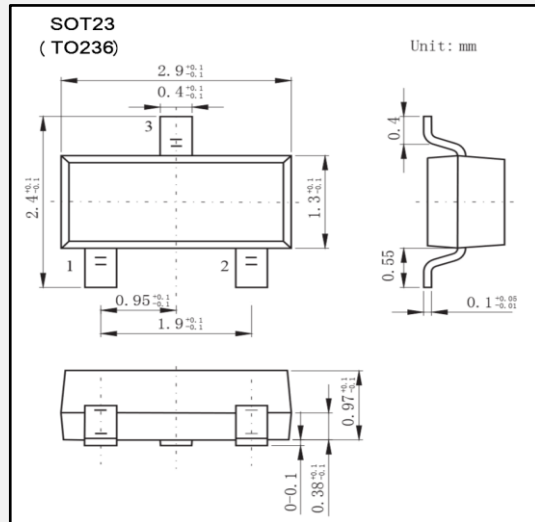
- **$V_{DS} = -50V \sim -60V$**

Apollo Part Number	Package	Status	Configuration	Polarity	VDS (V)	VGS ($\pm V$)	ID (A)	PD (W)	RDS(ON) (m Ω max) at VGS=			
							25°C	25°C	10V	4.5V	2.5V	1.8V
AP4421 (New!)	SOP-8	Active	Single	P	-60	20	-6.2	3.1	40	50		
BSS84 (New!)	SOT23 (TO236)	Active	Single	P	-50	20	-0.13	0.225		10		

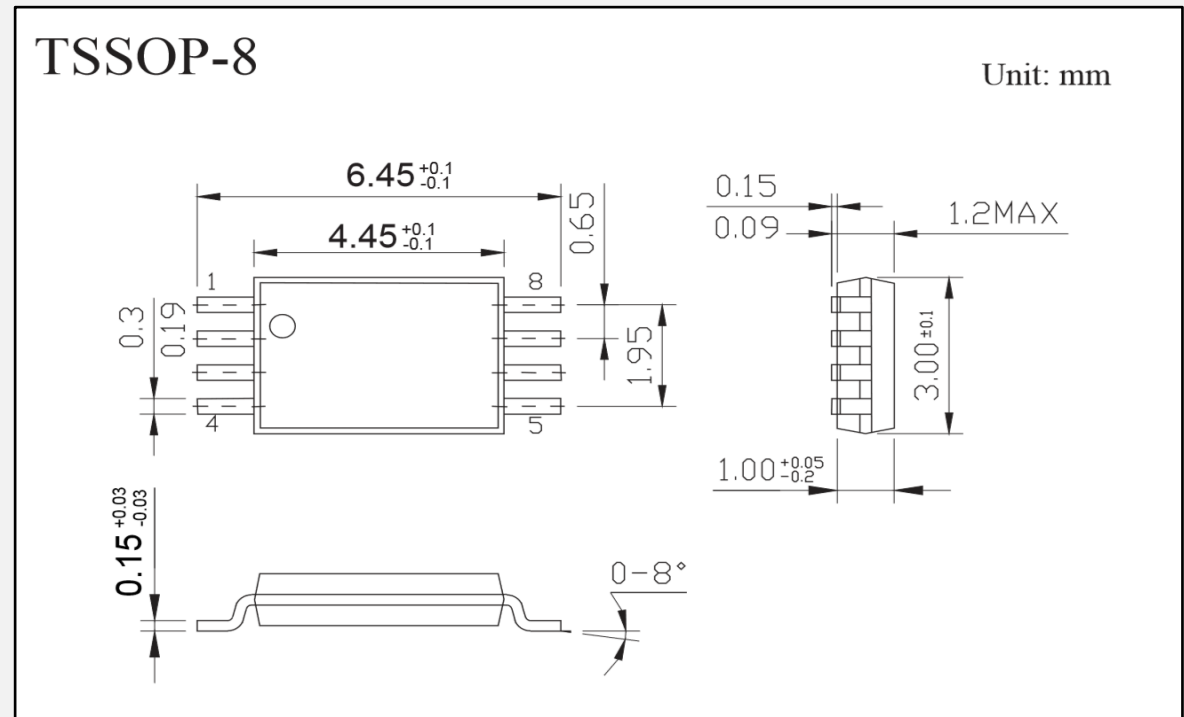
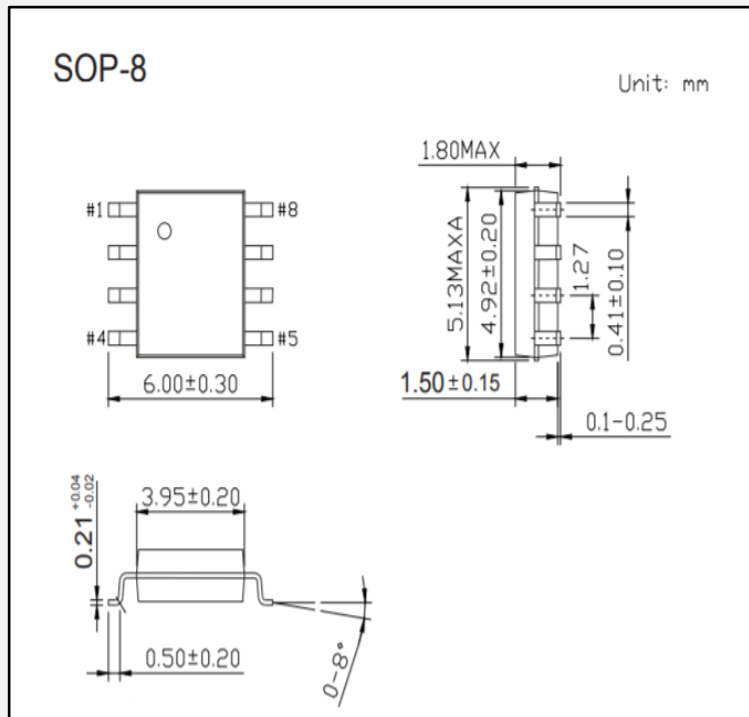
- **Complementary MOSFET**

Apollo Part Number	Package	Status	Configuration	Polarity	VDS (V)	VGS ($\pm$ V)	ID (A)	PD (W)	RDS(ON) (m Ω max) at VGS=			
							25°C	25°C	10V	4.5V	2.5V	1.8V
AP6601	SOT23-6 (SOT163) / TSOP6	Active	Complementary	N + P	30(N) / -30(P)	12	3.4(N) / -2.3(P)	1.15	60(N) / 115(P)	70(N) / 150(P)	90(N) / 200(P)	
AP6604	SOT23-6 (SOT163) / TSOP6	Active	Complementary	N + P	20(N) / -20(P)	8	3.4(N) / -2.5(P)	1.1		65(N) / 75(P)	75(N) / 95(P)	100(N) / 115(P)

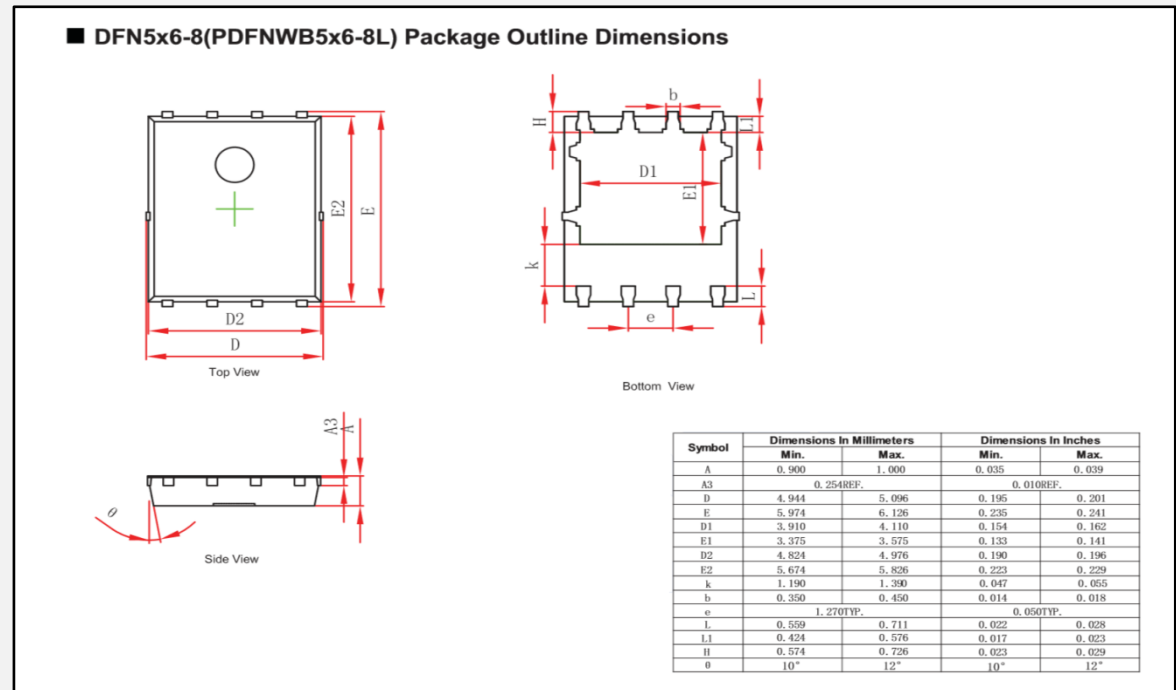
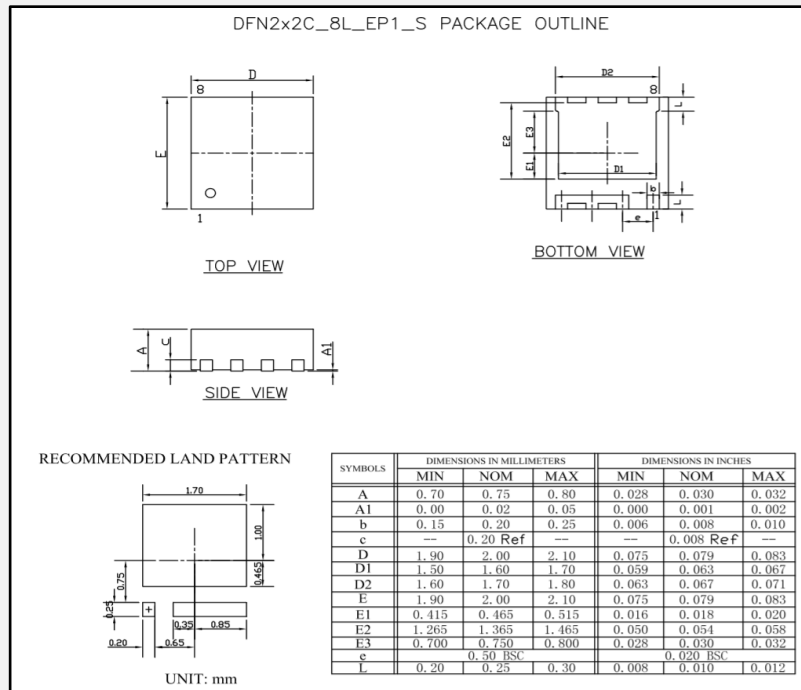
- Chip Package Information (Outlines)



- Chip Package Information (Outlines)



- Chip Package Information (Outlines)



- Chip Package Information (MOQ, Reel Size & Tape Width)**

Chip Package	MOQ (Multiple Order Quantity)	Reel Size (Inch)	Tape Width (mm)
SOT23 (TO236)	3,000 pcs / Reel	7	8
SOT23-3	3,000 pcs / Reel	7	8
SOT23-6 (SOT162) / TSOP6	3,000 pcs / Reel	7	8
SOT523	3,000 pcs / Reel	7	8
SOP-8	2,5000 pcs / Reel	13	12
TSSOP-8	2,5000 pcs / Reel	13	16
DFN2x2C_8L	3,000 pcs / Reel	7	8
DFN5x6-8 (PDFNWB5x6-8L)	5,000 pcs / Reel	13	12