

POWER MOSFET

1. Can be used with automatic placement machine.

Available in various packages with taping for automatic placement.

2. MOSFETs operating from 4 volts

These MOSFETs can be directly driven by an IC, saving counts of components (buffer transistors).

3. Low on-resistance

Optimized pattern design for low on-resistance.

2SK2094 (ROHM : 60V, 2A) $R_{DS(ON)} : 0.35\Omega$ (Max.)

Old MOSFETs of the same type (60V, 2A) $R_{DS(ON)} : 0.4 \sim 0.65\Omega$ (Max.)

4. High-speed switching

New process decreases input capacitance (c_{iss}) which increases switching speed.

2SK2042 (ROHM : 450V, 5A) $t_{on} : 25ns$ (Typ.), $t_{off} : 85ns$ (Typ.)

Old MOSFETs of the same type (450V, 5A) $t_{on} : 30ns$ (Typ.), $t_{off} : 90ns$ (Typ.)

5. Availability

Approx. 2 millions per month.

Quick reference

V_{DS} (V) I_D (A)	30	60	100	450
2	2SK2103 (MPT)	2SK2094 (CPT F5) 2SK2463 (MPT)	2SK2105 (CPT F5)	
3	2SK2430 (CPT F5)	2SK2306 (CPT F5)		
5		2SK2104 (CPT F5)		2SK2042 (PSD)
10		2SK2041 (PSD)		

MPT • CPT F5 • PSD

Application	Package			V_{DS}	I_D (A)	P_D (W) MPT ($T_a=25^\circ C$) CPT F5 ($T_c=25^\circ C$) PSD ($T_c=25^\circ C$)	$R_{DS(on)}$ (Ω) typ.	V_{GS} (V)	I_D (A)
	MPT	CPT F5	PSD						
Switching	2SK2103	—	—	30	2	2★	0.25	10	1
	2SK2463	—	—	60	2	2★	0.30	10	1
	—	2SK2430	—	30	3	20	0.125	10	1.5
	—	2SK2094	—	60	2	20	0.30	10	1
	—	2SK2306	—	60	3	20	0.15	10	1.5
	—	2SK2104	—	60	5	20	0.115	10	2.5
	—	—	2SK2041	60	10	60	0.08	10	5
	—	2SK2105	—	100	2	20	0.30	10	1
	—	—	2SK2042	450	5	60	1.0	10	2.5

Notes : 1. ★Under development

2. F5 denotes surface mount version of CPT (SC-64) package.

3. ★Package mounted on ceramic 40×40×0.7mm.

(Unit : mm)

Package	MPT (SOT-89)	CPT F5	PSD
Dimensions	TOP VIEW (1) Gate (2) Drain (3) Source	TOP VIEW (1) Gate (2) Drain (3) Source	TOP VIEW (1) Gate (2) Drain (3) Source
Actual size			
External dimensions (×1.0)			