

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 (ciss) 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	TOP VIEW	TOP VIEW
Actual size			
External dimensions (×1.0)			