

5 é / Descriptions

SOP-8 .> // x ; m Í % " MOS « | • 'ož

Complementary Enhancement MOSFET in a SOP-8 Plastic Package.

□ ª / Features

N-channel	P-channel
$V_{DS}(V)=30V$	$V_{DS}(V)=-30V$
$I_D=7.2A$	$I_D=-7A$
$R_{DS(ON)}<25m\Omega$ ($V_{GS}=10V$)	$R_{DS(ON)}<25m\Omega$ ($V_{GS}=-10V$)
$R_{DS(ON)}<35m\Omega$ ($V_{GS}=4.5V$)	$R_{DS(ON)}<35m\Omega$ ($V_{GS}=-4.5V$)
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Đ ÷ / Applications

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These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies. And suitable for use as a load switch or in PWM applications.

Ã W] Ô • / Equivalent Circuit

• Ů - æ / Pinning

PIN1 y S1 PIN 2 y G1 PIN 3 y S2 PIN 4 y G2
 PIN 5 y D2 PIN 6 y D2 PIN 7 y D1 PIN 8 y D1

, M V / Marking

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See Marking Instructions.

Absolute Maximum Ratings(Ta=25℃ ;)

Parameter	Symbol	Rating		Unit
		N-channel	P-channel	
Drain-Source Voltage	V_{DS}	± 30		V
Gate-Source Voltage	V_{GS}	± 20		V
Continuous Drain Current	$I_D (T_A=25^\circ\text{C})$	7.2	-7	A
Pulsed Drain Current	I_{DM}	± 40		A
Power Dissipation	$P_D (T_A=25^\circ\text{C})$	2		W
Maximum Junction-to-Ambient	R_{JA}	$t \leq 10\text{s}$		/W
		Steady-State		/W
Maximum Junction-to-Lead	R_{JL}	Steady-State		/W
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150		

@ f Parameter	... Z Symbol	y i Ú ^ Test Conditions	Â 4 > Min	Á ° > Typ	Â Ý > Max	% y Unit
Drain-Source Breakdown Voltage	BV _{DSS}	V _{GS} =0V I _D =250 A	30	32		V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =30V V _{GS} =0V			1.0	A
Gate-Body leakage current	I _{GSS}	V _{GS} =±20V V _{DS} =0V			100	nA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} =V _{GS} I _D =250 A	1.0	1.7	2.5	V
Static Drain-Source On-Resistance	R _{DS(on)}	V _{GS} =10V I _D =7.2A		21	25	m

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1 ?è Ô ? d • Ž ¢ / N-CHANNEL Electrical Characteristic Curve

@ f Parameter	... Z Symbol	y i Ú ^ Test Conditions	Â 4 > Min	Á ° > Typ	Â Ý > Max	% y Unit
Drain-Source Breakdown Voltage	BV _{DSS}	V _{GS} =0V I _D =-250 A	-30	-33		V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =-24V V _{GS} =0V			-1.0	A
Gate-Body leakage current	I _{GSS}	V _{GS} =±20V V _{DS} =0V			±100	nA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} =V _{GS} I _D =-250 A	-1.0	-1.5	-2.5	V

Static Drain-Source
On-Resistance

R_{DS(on)}

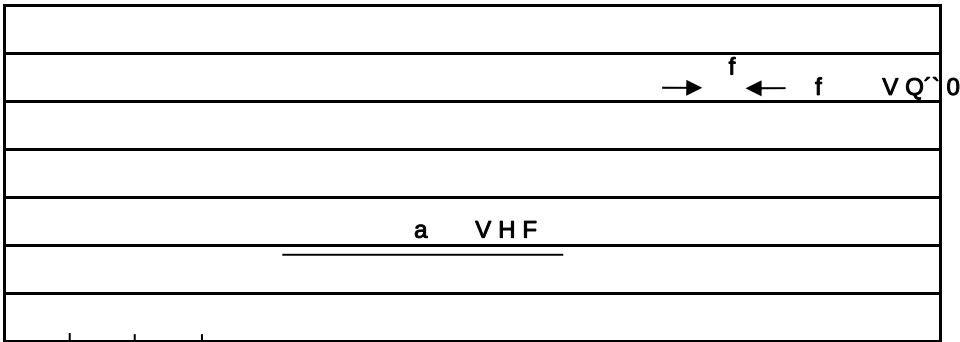
3?è Ô ? d • Ž ¢ / P-CHANNEL Electrical Characteristic Curve

3?è Ô ? d • Ž ¢ / P-CHANNEL Electrical Characteristic Curve

Ø □ =) ¢ / Package Dimensions

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šWD t...•Ž¢ (x/) / :KSVKXGZ[XK 6XULORK LUX /8 8KLRU] 9URJKXOTM 6



7LPQ°†2 f.4 —0 2ž" "€À €xt H ` Æ4 `6‘À0

a ¢ y

- 1o• Ä ½ “† 150 ½180 - k ž • 60 ½90sec;
- 2o• Q > “† 245 r5 - k ž • 4 Ò 5 r0.5sec;
- 3o•D N ò i Ò 0 ,† 2 ½10 - /sec.

- Note:
- 1.Preheating:150~180 - , Time:60~90sec.
 - 2.Peak Temp.:245 r5 - , Duration:5 r0.5sec.
 - 3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ¯ »] / Resistance to Soldering Heat Test Conditions

“† y 260 r5 - ž • y 10 r1 sec. Temp.:260±5 Time:10±1 sec

G P á / Packaging SPEC.

2 & x / REEL

Package Type 7>û ~ E	Units ;>û ¡H					Dimension ;>û p . (unit /mm³)		
	Units/Reel / --	Reels/Inner Box -- /-	Units/Inner Box /-	Inner Boxes/Outer Box - /1ç	Units/Outer Box /1ç	Reel	Inner Box	Outer Boxç