



**CHENMKO ENTERPRISE CO.,LTD**

**CHM6308SGP**

**SURFACE MOUNT**

**Dual P-Channel Enhancement Mode Field Effect Transistor**

VOLTAGE 20 Volts CURRENT 1.0 Ampere

Halogens free devices

**APPLICATION**

- \* Power Management in Note book
- \* Portable Equipment
- \* Battery Powered System
- \* DC/DC Converter
- \* Load Switch
- \* DSC
- \* LCD Display inverter

**FEATURE**

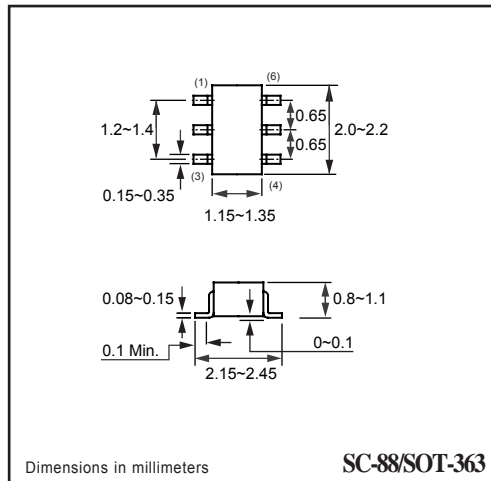
- \* Small surface mounting type. (SC-88/SOT-363)
- \* High density cell design for low  $R_{DS(ON)}$ .

**CONSTRUCTION**

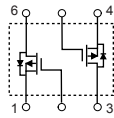
- \* Dual P-Channel Enhancement



SC-88/SOT-363



**CIRCUIT**



**Absolute Maximum Ratings**  $T_A = 25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	CHM6308SGP	Units
$V_{DSS}$	Drain-Source Voltage	-20	V
$V_{GSS}$	Gate-Source Voltage - Continuous	$\pm 12$	V
$I_D$	Maximum Drain Current - Continuous	-1.0	A
$P_D$	Maximum Power Dissipation	350	mW
$T_J, T_{STG}$	Operating and Storage Temperature Range	-55 to 150	$^\circ\text{C}$

**Thermal characteristics**

$R_{\theta JA}$	Thermal Resistance, Junction-to-Ambient	400	$^\circ\text{C/W}$
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## RATING CHARACTERISTIC CURVES ( CHM6308SGP )

**Electrical Characteristics**  $T_A = 25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Conditions	Min	Typ	Max	Units
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### OFF CHARACTERISTICS

$BV_{DSS}$	Drain-Source Breakdown Voltage	$V_{GS} = 0\text{ V}, I_D = -250\ \mu\text{A}$	-20			V
$I_{DSS}$	Zero Gate Voltage Drain Current	$V_{DS} = -20\text{ V}, V_{GS} = 0\text{ V}$			-1	$\mu\text{A}$
		$V_{DS} = -25\text{ V}, V_{GS} = 0\text{ V}, T_J = 55^\circ\text{C}$			-5	$\mu\text{A}$
$I_{GSSF}$	Gate - Body Leakage, Forward	$V_{GS} = 12\text{ V}, V_{DS} = 0\text{ V}$			100	nA
$I_{GSSR}$	Gate - Body Leakage, Reverse	$V_{GS} = -12\text{ V}, V_{DS} = 0\text{ V}$			-100	nA

### ON CHARACTERISTICS

$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS} = V_{GS}, I_D = -250\ \mu\text{A}$	-0.35		-0.8	V
$R_{DS(ON)}$	Static Drain-Source On-Resistance	$V_{GS} = -4.5\text{ V}, I_D = -1.0\text{ A}$		420	520	$\text{m}\Omega$
		$V_{GS} = -2.5\text{ V}, I_D = -0.8\text{ A}$		580	700	
$V_{SD}$	Diode Forward Voltage	$V_{GS} = 0\text{ V}, I_S = -0.5\text{ A}$		-0.8	-1.2	V

### SWITCHING CHARACTERISTICS

$Q_g$	Total Gate Charge	$V_{DS} = -10\text{ V}, I_D = -0.88\text{ A}$ $V_{GS} = -4.5\text{ V}$		1.5	20	nC
$Q_{gs}$	Gate-Source Charge			0.3		
$Q_{gd}$	Gate-Drain Charge			0.2		
$t_{on}$	Turn-On Time	$V_{DD} = -10\text{ V}$ $I_D = -0.5\text{ A}, V_{GEN} = -4.5\text{ V}$ $R_{GEN} = 6\ \Omega$		18	30	nS
$t_r$	Rise Time			25	40	
$t_{off}$	Turn-Off Time			15	45	
$t_f$	Fall Time			12	20	

## RATING CHARACTERISTIC CURVES ( CHM6308SGP )

### Typical Electrical Characteristics

