

Halogens free devices



CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT

Dual P-Channel Enhancement Mode Field Effect Transistor

VOLTAGE 20 Volts CURRENT 0.5 Ampere

CHM1023VGP

FEATURE

- * Small surface mounting type. (SOT-563)
- * High density cell design for low R_{DS(ON)}.
- * Suitable for high packing density.

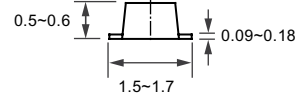
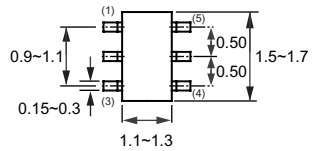
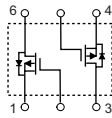
CONSTRUCTION

- * P-Channel Enhancement



SOT-563

CIRCUIT



Dimensions in millimeters

SOT-563

Absolute Maximum Ratings T_A = 25°C unless otherwise noted

Symbol	Parameter	CHM1023VGP	Units
V _{DSS}	Drain-Source Voltage	-20	V
V _{GSS}	Gate-Source Voltage - Continuous	±12	V
I _D	Maximum Drain Current - Continuous	-0.5	A
P _D	Maximum Power Dissipation	350	mW
T _J , T _{STG}	Operating and Storage Temperature Range	-55 to 150	°C

RATING CHARACTERISTIC CURVES (CHM1023VGP)

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	μA
		$V_{DS} = -20\text{ V}, T_j = 55^\circ\text{C}$			-5	μA
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 (Note 1)

$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS} = V_{GS}, I_D = 1.0\text{ mA}$	-0.35		-0.8	V
$R_{DS(ON)}$	Static Drain-Source On-Resistance	$V_{GS} = -4.5\text{ V}, I_D = -0.45\text{ A}$			0.52	Ω
g_{FS}	Forward Transconductance	$V_{DS} = -10\text{ V}, I_D = -250\text{ mA}$		0.4		S

DYNAMIC CHARACTERISTICS

Q_g	Total Gate Charge	$V_{DS} = -10\text{ V}, V_{GS} = -4.5\text{ V}, I_D = -0.6\text{ A}$		1.5	2.0	nC
Q_{gs}	Gate-Source Charge			0.3		
Q_{gd}	Gate-Drain Charge			0.35		
t_{on}	Turn-On Time	$V_{DD} = -10\text{ V}, I_D = -400\text{ mA}, V_{GS} = -4.5\text{ V}, R_{GEN} = 6\ \Omega$			10	nS
t_{off}	Turn-Off Time				15	