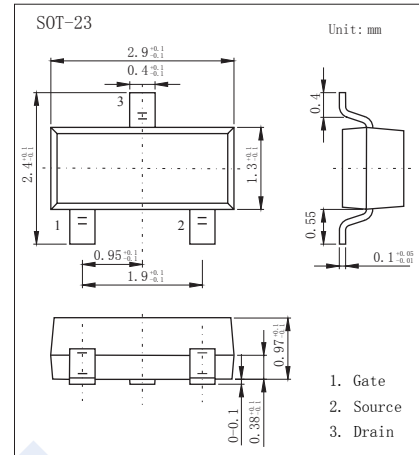
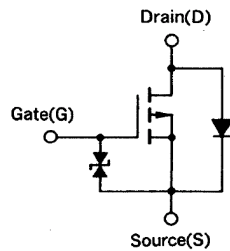


## P-Channel MOSFET

### 2SJ204

#### ■ Features

- $V_{DS}$  (V) = -30V
- $I_D$  = -200mA
- $R_{DS(ON)} < 8\ \Omega$  ( $V_{GS} = -10V$ )
- $R_{DS(ON)} < 13\ \Omega$  ( $V_{GS} = -4V$ )
- Complementary to 2SK1582



#### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DS}$	-30	V
Gate-Source Voltage	$V_{GS}$	$\pm 20$	
Continuous Drain Current	$I_D$	-200	mA
Pulsed Drain Current (Note.1)	$I_{DM}$	-400	
Power Dissipation	$P_D$	200	mW
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Operating Temperature	$T_{opt}$	-55 to 80	
Junction Storage Temperature Range	$T_{stg}$	-55 to 150	

Note.1:  $PW \leq 10\text{ms}$ , Duty Cycle  $\leq 50\%$

#### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

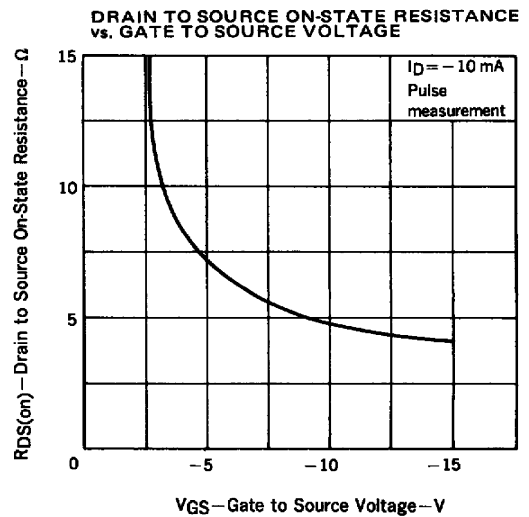
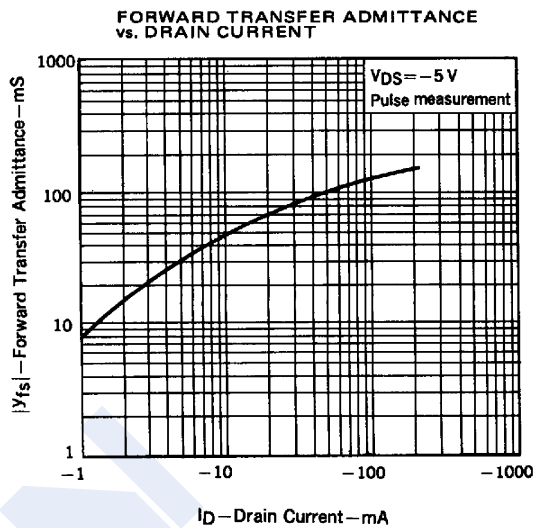
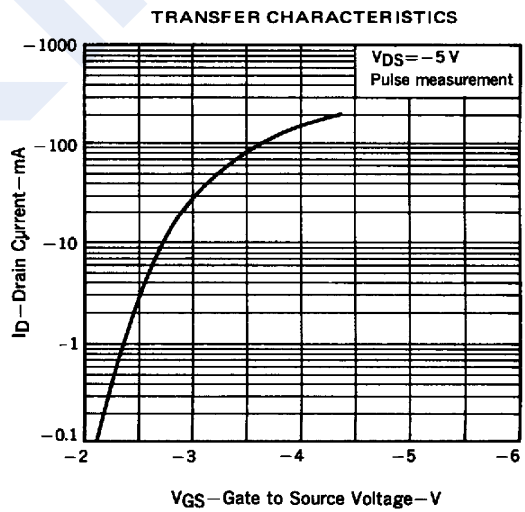
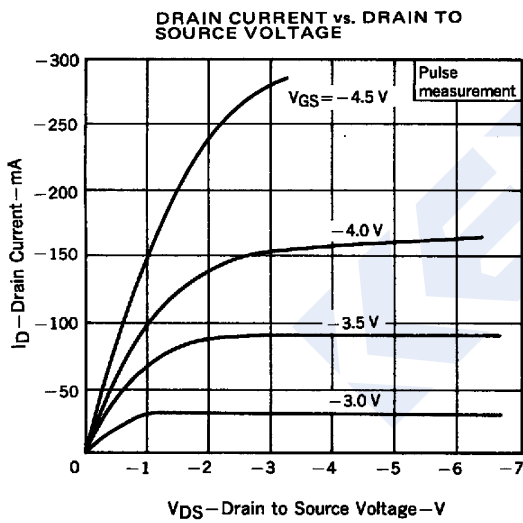
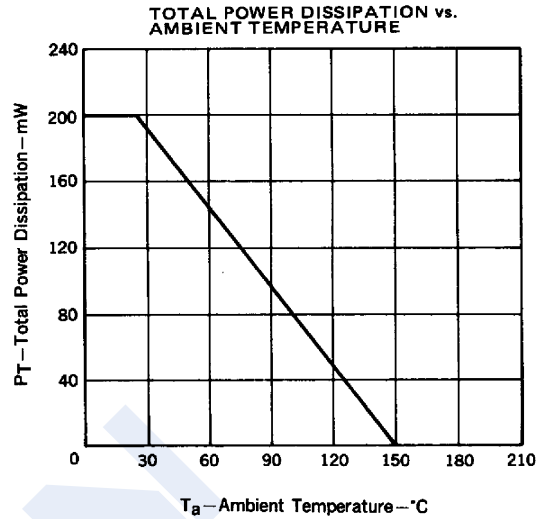
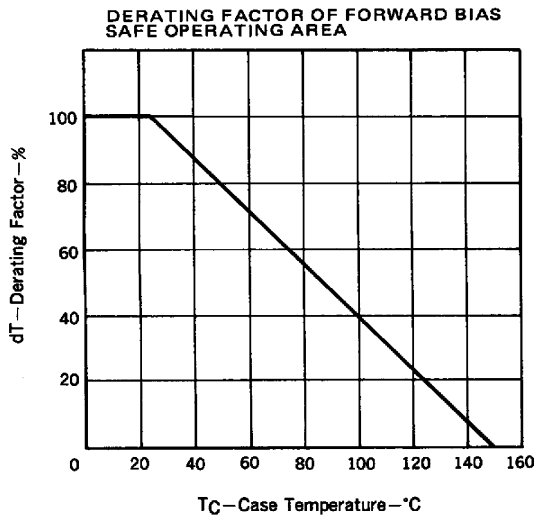
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	$V_{BSS}$	$I_D = -250\ \mu\text{A}$ , $V_{GS} = 0V$	-30			V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS} = -30V$ , $V_{GS} = 0V$			-1	$\mu\text{A}$
Gate-Body leakage current	$I_{GSS}$	$V_{DS} = 0V$ , $V_{GS} = \pm 20V$			$\pm 1$	$\mu\text{A}$
Gate Cut off Voltage	$V_{GS(off)}$	$V_{DS} = -5V$ , $I_D = -1\ \mu\text{A}$	-1.4		-2.4	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	$V_{GS} = -4V$ , $I_D = -10\text{mA}$			13	$\Omega$
		$V_{GS} = -10V$ , $I_D = -10\text{mA}$			8	
Forward Transconductance	$g_{FS}$	$V_{DS} = -5V$ , $I_D = -10\text{mA}$	20			mS
Input Capacitance	$C_{iss}$	$V_{GS} = 0V$ , $V_{DS} = -10V$ , $f = 1\text{MHz}$		27		pF
Output Capacitance	$C_{oss}$			27		
Reverse Transfer Capacitance	$C_{rss}$			6		
Turn-On Delay Time	$t_{d(on)}$		$V_{GS(on)} = -4V$ , $V_{DS} = -5V$ , $I_D = -0.3A$ , $R_L = 1.5\ \Omega$ , $R_{GEN} = 10\ \Omega$		120	
Turn-On Rise Time	$t_r$			240		
Turn-Off Delay Time	$t_{d(off)}$			135		
Turn-Off Fall Time	$t_f$			210		

#### ■ Marking

Marking	H15

## P-Channel MOSFET 2SJ204

■ Typical Characteristics



## P-Channel MOSFET 2SJ204

■ Typical Characteristics

