Silicon P-Channel MOS FET

HITACHI

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Application

Low frequency power amplifier

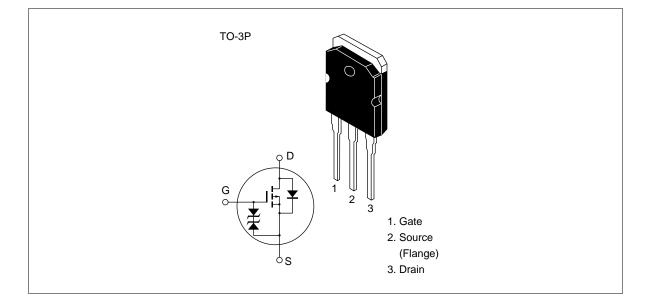
Complementary pair with 2SK1056, 2SK1057 and 2SK1058

Features

- Good frequency characteristic
- High speed switching
- Wide area of safe operation
- Enhancement-mode
- Good complementary characteristics
- Equipped with gate protection diodes
- Suitable for audio power amplifier



Outline



Absolute Maximum Ratings (Ta = 25°C)

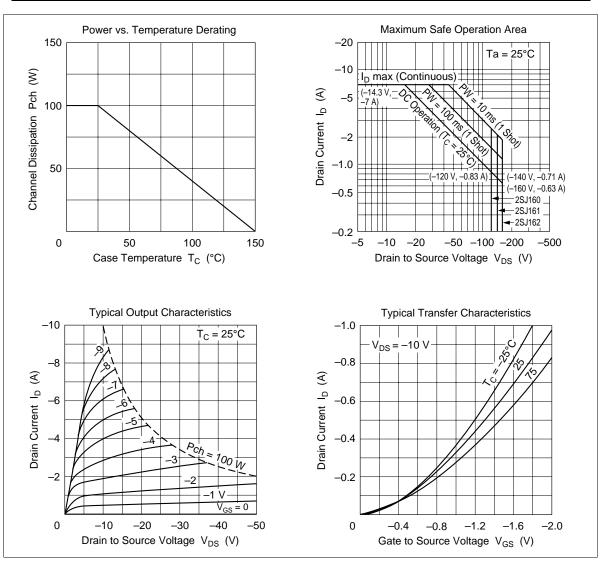
Item		Symbol	Ratings	Unit	
Drain to source voltage	2SJ160	V _{DSX}	-120	V	
	2SJ161		-140		
	2SJ162		-160		
Gate to source voltage		V _{GSS}	±15	V	
Drain current		I _D	-7	А	
Body to drain diode reverse drain current		I _{DR}	-7	А	
Channel dissipation		Pch*1	100	W	
Channel temperature		Tch	150	°C	
Storage temperature		Tstg	-55 to +150	°C	

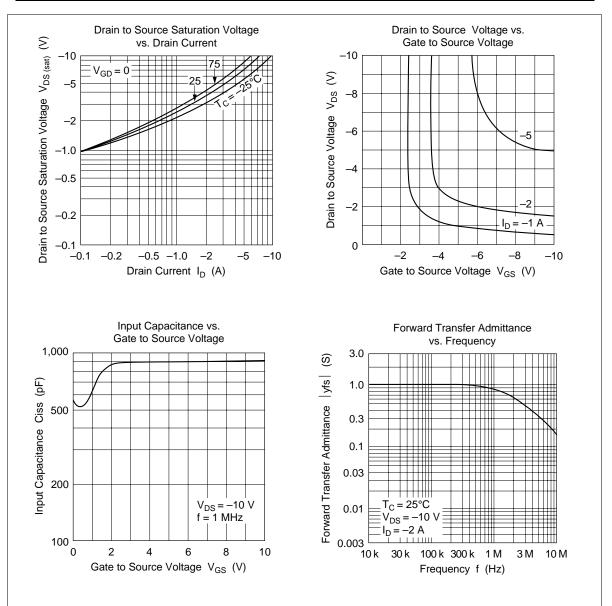
Note: 1. Value at $T_c = 25^{\circ}C$

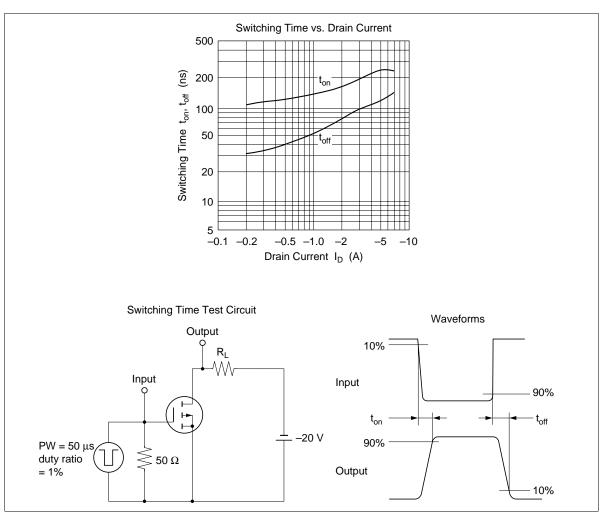
Electrical Characteristics (Ta = 25°C)

Item		Symbol	Min	Тур	Мах	Unit	Test conditions
Drain to source	2SJ160	$V_{(BR)DSX}$	-120	_		V	$I_{\rm D}$ = -10 mA , $V_{\rm GS}$ = 10 V
breakdown voltage	2SJ161		-140		_	V	
	2SJ162	_	-160	_	_	V	
Gate to source break voltage	kdown	$V_{(\text{BR})\text{GSS}}$	±15	—	_	V	$I_{G} = \pm 100 \ \mu A, \ V_{DS} = 0$
Gate to source cutof	f voltage	$V_{GS(off)}$	-0.15		-1.45	V	$I_{\rm D} = -100 \text{ mA}, V_{\rm DS} = -10 \text{ V}$
Drain to source satu voltage	ration	$V_{\text{DS(sat)}}$	—	—	-12	V	$I_{\rm D} = -7$ A, $V_{\rm GD} = 0^{*1}$
Forward transfer adr	nittance	y _{fs}	0.7	1.0	1.4	S	$I_{\rm D} = -3$ A, $V_{\rm DS} = -10$ V ^{*1}
Input capacitance		Ciss	_	900	_	pF	$V_{GS} = 5 V, V_{DS} = -10V,$
Output capacitance		Coss	_	400	_	pF	f = 1 MHz
Reverse transfer cap	pacitance	Crss	_	40	_	pF	
Turn-on time		t _{on}	—	230		ns	$V_{\rm DD} = -20 \text{ V}, \text{ I}_{\rm D} = -4 \text{ A}$
Turn-off time		t _{off}	_	110	_	ns	

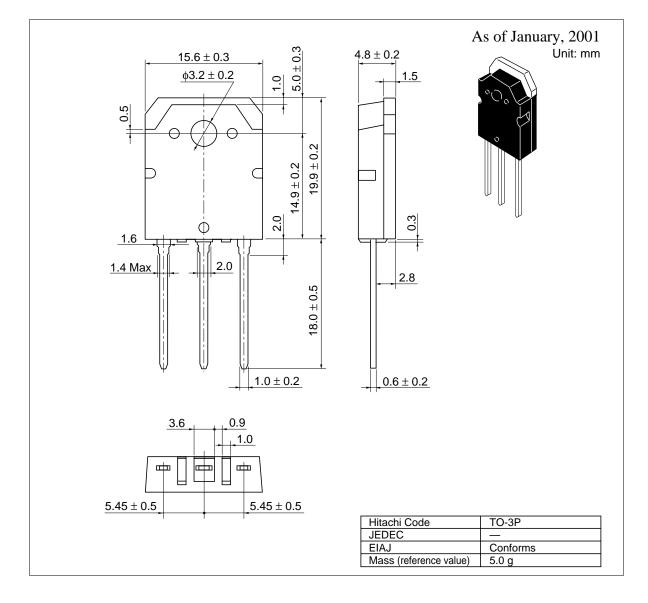
Note: 1. Pulse test







Package Dimensions



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