TAVAKOL ELECTRONIC
توکل الکترونیک
مرجع تخصصی تأمین قطعات الکترونیکی اورجینال
این دیتاشیت توسط توکل الکترونیک تهیه و ارائه شده است.
جهت مشاهده قیمت، موجودی و ثبت سفارش این قطعه به وب‌سایت توکل الکترونیک مراجعه فرمایید.
مشاهده قیمت و خرید
برای خرید و مشاهده سایر محصولات کلیک کنید

2SJ117

Silicon P-Channel MOS FET

HITACHI

ADE-208-1180 (Z)
1st. Edition
Mar. 2001

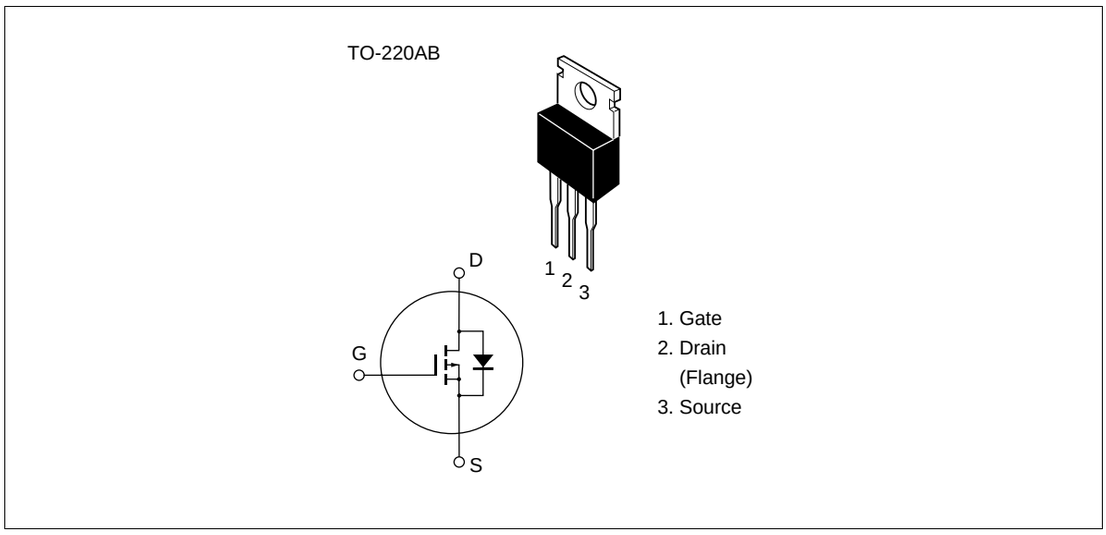
Application

High speed power switching

Features

- High speed switching
- Good frequency characteristics
- Wide area of safe operation
- Suitable for switching regulator, DC-DC converter and ultrasonic power oscillators.

Outline



Hitachi semiconductor

Absolute Maximum Ratings (Ta = 25°C)

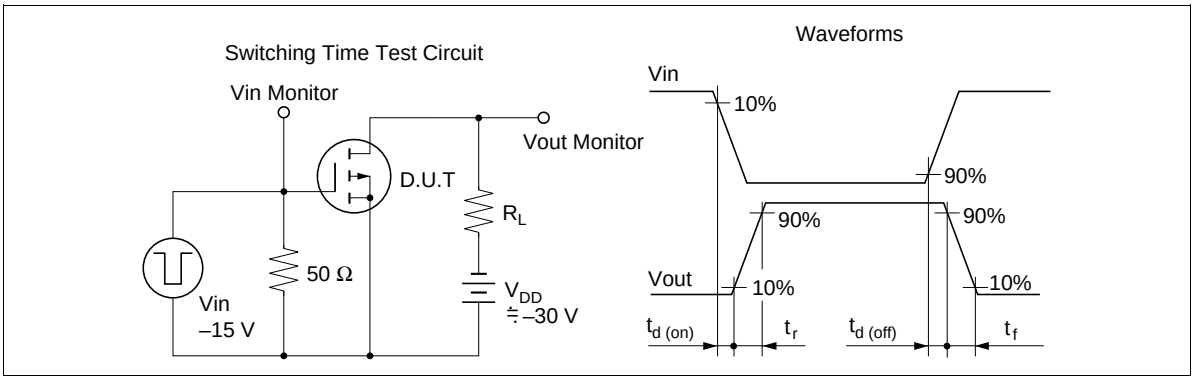
Item	Symbol	Ratings	Unit
Drain to source voltage	V_{DSS}	–400	V
Gate to source voltage	V_{GSS}	±20	V
Drain current	I_D	–2	A
Drain peak current	$I_{D(pulse)}$	–4	A
Body to drain diode reverse drain current	I_{DR}	–2	A
Channel dissipation	Pch*[1]	40	W
Channel temperature	Tch	150	°C
Storage temperature	Tstg	–55 to +150	°C

Notes: 1. Value at T_C = 25°C

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Drain to source breakdown voltage	$V_{(BR)DSS}$	–400	—	—	V	I_D = –10 mA, V_{GS} = 0
Gate to source leak current	I_{GSS}	—	—	±1	µA	V_{GS} = ±20 V, V_{DS} = 0
Zero gate voltage drain current	I_{DSS}	—	—	–1	mA	V_{DS} = –320 V, V_{GS} = 0
Gate to source cutoff voltage	$V_{GS(off)}$	–2.0	—	–5.0	V	I_D = –1 mA, V_{DS} = –10 V
Static drain to source on state resistance	$R_{DS(on)}$	—	5	7		I_D = –1 A, V_{GS} = –15 V*[1]
Forward transfer admittance	$\|y_{fs}\|$	0.4	0.7	—	S	I_D = –1 A, V_{DS} = –20 V*[1]
Input capacitance	Ciss	—	520	—	pF	V_{DS} = –10 V, V_{GS} = 0,
Output capacitance	Coss	—	110	—	pF	f = 1 MHz
Reverse transfer capacitance	Crss	—	15	—	pF	
Turn-on delay time	$t_{d(on)}$	—	10	—	ns	I_D = –2 A, V_{GS} = –15 V,
Rise time	t_r	—	25	—	ns	R_L = 15
Turn-off delay time	$t_{d(off)}$	—	45	—	ns	
Fall time	t_f	—	35	—	ns	
Body to drain diode forward voltage	V_{DF}	—	–0.8	—	V	I_F = –1 A, V_{GS} = 0
Body to drain diode reverse recovery time	t_{rr}	—	300	—	ns	I_F = –1 A, V_{GS} = 0, di_F/dt = 100 A/µs

Note: 1. Pulse test


Switching Time Test Circuit
Vin Monitor
Vout Monitor
D.U.T
R_L
50 Ω
Vin
–15 V
V_{DD}
≒ –30 V
Waveforms
Vin
10%
90%
90%
90%
Vout
10%
10%
$t_{d\ (on)}$
t_r
$t_{d\ (off)}$
t_f