

1. TYPE RTU002P02

2. STRUCTURE SILICON P-CHANNEL MOS FET

3. APPLICATIONS SWITCHING

4. ABSOLUTE MAXIMUM RATINGS [Ta=25 °C]

DRAIN-SOURCE VOLTAGE V_{DSS} . . . -20V

GATE-SOURCE VOLTAGE V_{GSS} . . . ±12V

DRAIN CURRENT CONTINUOUS I_D . . . ±0.25A

PULSED I_{DP} . . . ±0.5A PW 10 μs DUTY CYCLE 1%

TOTAL POWER DISSIPATION P_D . . . 0.2W EACH TERMINAL MOUNTED
ON A RECOMMENDED LAND

CHANNEL TEMPERATURE T_{ch} . . . 150

RANGE OF STORAGE TEMPERATURE T_{stg} . . . -55 ~ 150

5. THERMAL RESISTANCE

CHANNEL TO AMBIENT R_{th(ch-a)} . . . 625 /W EACH TERMINAL MOUNTED
ON A RECOMMENDED LAND

DESIGN	CHECK	APPROVAL	DATE : 27/JAN/2003	SPECIFICATION No. TSQ03025H-126
			REV. : 0	ROHM CO., LTD.

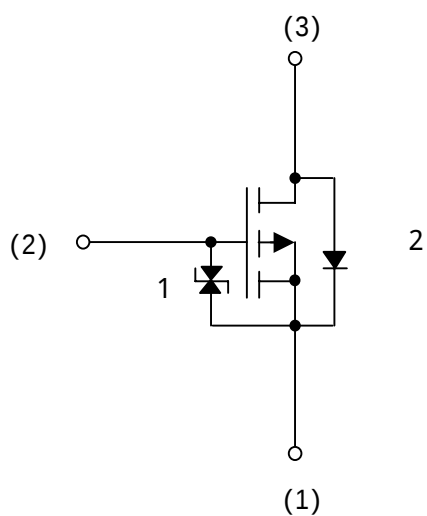
6.ELECTRICAL CHARACTERISTICS [Ta=25]

PARAMETER	ITEM	CONDITION	MIN.	TYP.	MAX.
GATE-SOURCE LEAKAGE	I _{GSS}	V _{GS} = ± 12V / V _{DS} =0V	-	-	± 10 μA
DRAIN-SOURCE BREAKDOWN VOLTAGE	V (BR) _{DSS}	I _D = -1mA / V _{GS} =0V	-20V	-	-
ZERO GATE VOLTAGE DRAIN CURRENT	I _{DSS}	V _{DS} = -20V / V _{GS} =0V	-	-	-1 μA
GATE THRESHOLD VOLTAGE	V _{GS} (th)	V _{DS} = -10V / I _D = -1mA	-0.7V	-	-2.0V
STATIC DRAIN-SOURCE ON-STATE RESISTANCE	R _{DS(on)} * PULSED	I _D = -0.25A V _{GS} = -4.5V	-	1.0 Ω	1.5 Ω
		I _D = -0.25A V _{GS} = -4.0V	-	1.1 Ω	1.6 Ω
		I _D = -0.15A V _{GS} = -2.5V	-	2.0 Ω	3.0 Ω
FORWARD TRANSFER ADMITTANCE	Y _{fs} * PULSED	V _{DS} = -10V I _D = -0.15A	0.2S	-	-
INPUT CAPACITANCE	C _{iss}	V _{DS} = -10V / V _{GS} =0V f=1MHz	-	50pF	-
OUTPUT CAPACITANCE	C _{oss}		-	5pF	-
REVERSE TRANSFER CAPACITANCE	C _{rss}		-	5pF	-
TURN-ON DELAY TIME	t _{d(on)} * PULSED	I _D = -0.15A V _{DD} -15V V _{GS} = -4.5V R _L 100Ω R _{GS} =10Ω	-	9ns	-
RISE TIME	t _r * PULSED		-	6ns	-
TURN-OFF DELAY TIME	t _{d(off)} * PULSED		-	35ns	-
FALL TIME	t _f * PULSED		-	45ns	-

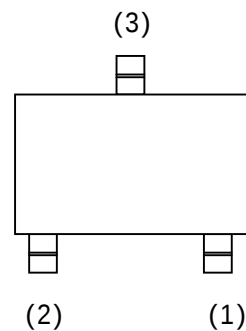
BODY DIODE CHARACTERISTICS (SOURCE-DRAIN CHARACTERISTICS) [Ta=25]

PARAMETER	ITEM	CONDITION	MIN.	TYP.	MAX.
FORWARD VOLTAGE	V _{SD}	I _S = -0.1A / V _{GS} =0V	-	-	-1.2V

7. INNER CIRCUIT

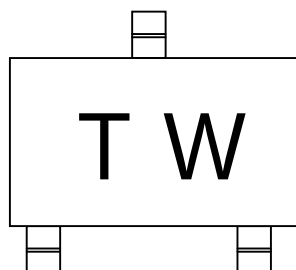


(1) SOURCE
(2) GATE
(3) DRAIN



1 ESD PROTECTION DIODE
2 BODY DIODE

8. MARKING



“ TW ” MEANS RTU002P02.