RTE13J1M

Composite Transistor
Zener Diode
Silicon P-channel MOSFET

DESCRIPTION

RTE13J1M is compound transistor built with correspond INJ0001AX chip and 8.2V Zener diode in SC-88 package.

FEATURE

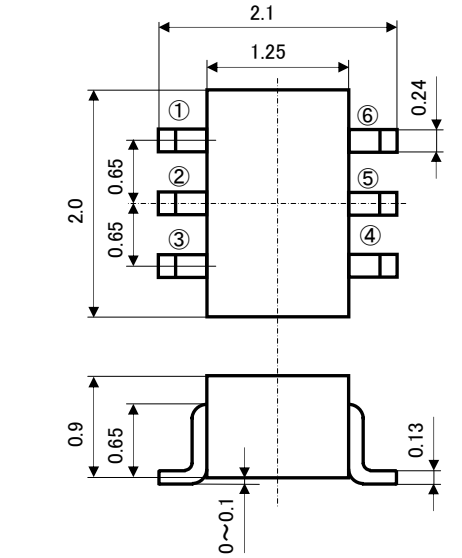
Silicon epitaxial type
Each transistor elements are independent.
Mini package for easy mounting

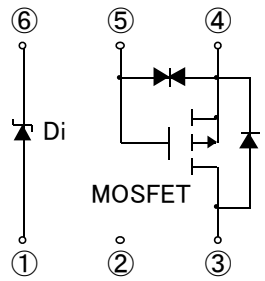
APPLICATION

Power supply circuit, Driver circuit, etc

OUTLINE DRAWING

Unit:mm





電極接続
①:ANODE
②:NC
③:DRAIN
④:SOURCE
⑤:GATE
⑥:CATHODE

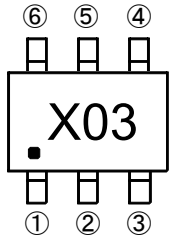
JEITA:SC-88
JEDEC:—

MAXIMUM RATING(Ta=25℃)

SYMBOL	PARAMETER	RATING		UNIT
V_{DSS}	Drain-source voltage	MOSFET	-50	V
V_{GSS}	Gate-source voltage		±8	V
I_D	Drain current(DC)		-100	mA
I_{DP}	Drain current(Pulse)		-400(*1)	mA
P_T	Total power dissipation(Ta=25℃)	MOSFET Di Common	150(*2)	mW
T_j	Junction temperature		+150	℃
T_{stg}	Storage temperature		-55～+150	℃

*1:Pw≦10μs, Duty cycle≦1% *2:Mounted on glass epoxy board(9mm×19mm×1mm)

MARKING



ELECTRICAL CHARACTERISTICS(Ta=25℃)

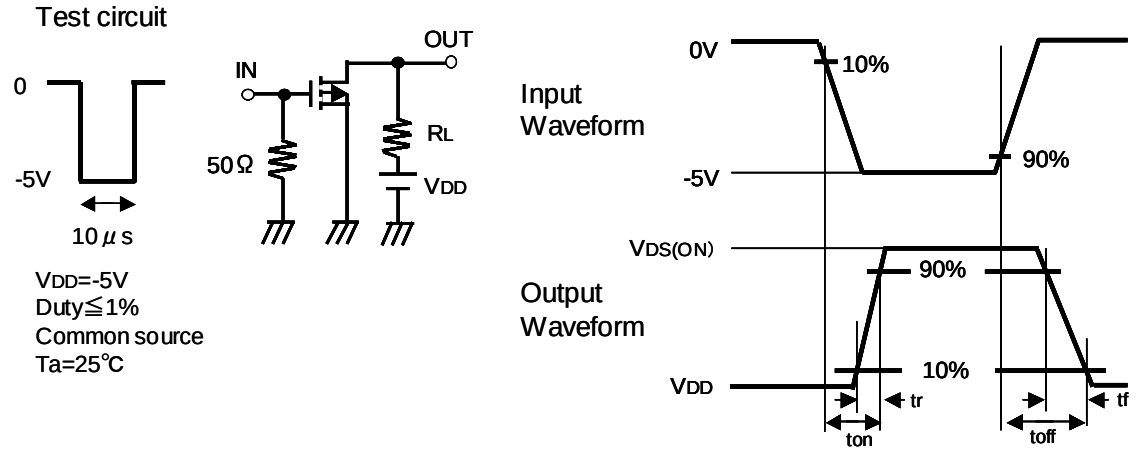
【 MOSFET 】

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
$V_{(BR)DSS}$	Drain-source breakdown voltage	I_D=−100μA, V_{GS}=0V	−50	−	−	V
I_{GSS}	Gate-source leak current	V_{GS}=±5V, V_{DS}=0V	−	−	±0.5	μA
I_{DSS}	Zero gate voltage drain current	V_{DS}=−50V ,V_{GS}=0V	−	−	−1.0	μA
V_{th}	Gate threshold voltage	I_D=−250μA, V_{DS}= V_{GS}	−0.6	−	−1.2	V
$\|Y_{fs}\|$	Forward transfer admittance	V_{DS}=−10V, I_D=−0.1A	−	220	−	mS
$R_{DS(ON)}$	Static drain-source on-state resistance	I_D=−100mA, V_{GS}=−4.0V	−	7	−	Ω
C_{iss}	Input capacitance	V_{DS}=−10V V_{GS}=0V,f=1MHz	−	28	−	pF
C_{oss}	Output capacitance		−	5.2	−	
t_{on}	Switching time	V_{DD}=−5V , I_D=−10mA V_{GS}=0～−5V	−	13	−	ns
t_{off}			−	135	−	

【 Di 】

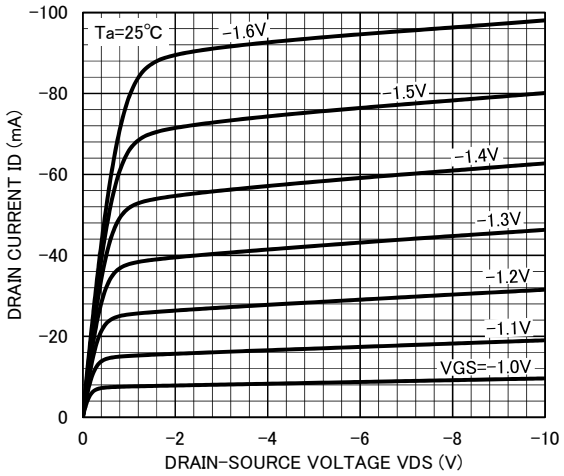
Zener voltage V_Z(V)			Reverse current I_R(μA)	
MIN	MAX	I_Z(mA)	MAX	V_R(V)
7.790	8.610	5	0.5	6.5

Switching time test condition

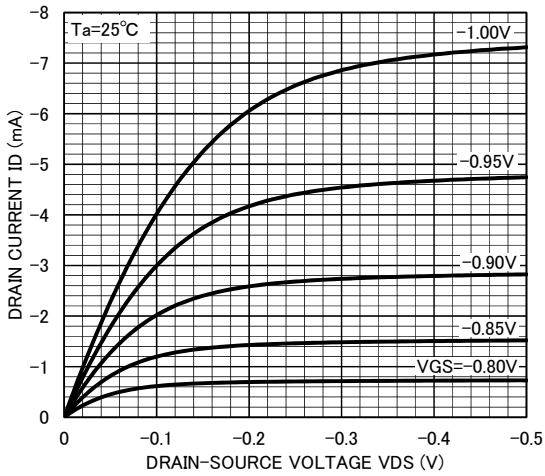


【MOSFET】TYPICAL CHARACTERISTICS

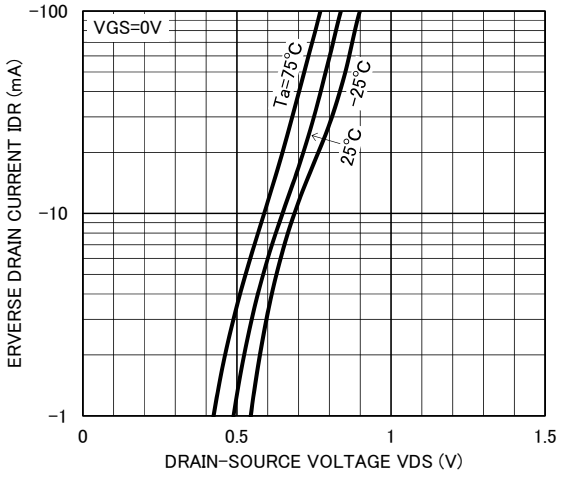
ID-VDS



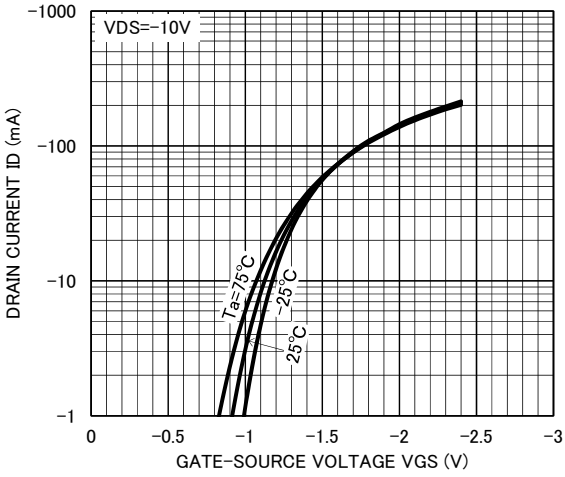
ID-VDS (LOW VOLTAGE REGION)



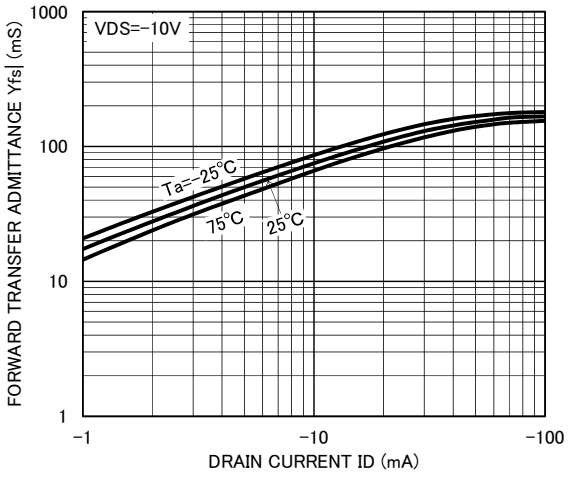
IDR-VDS



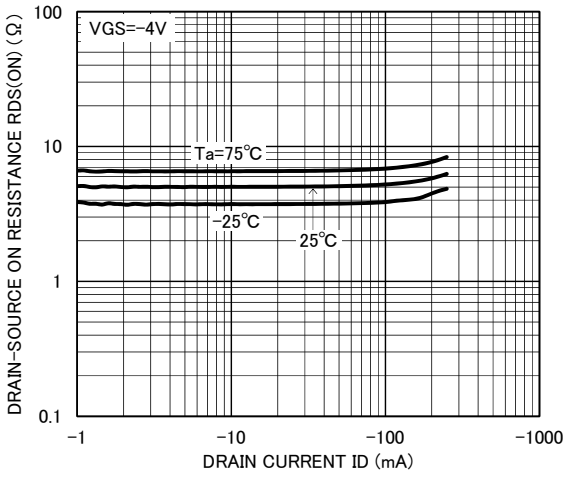
ID-VGS



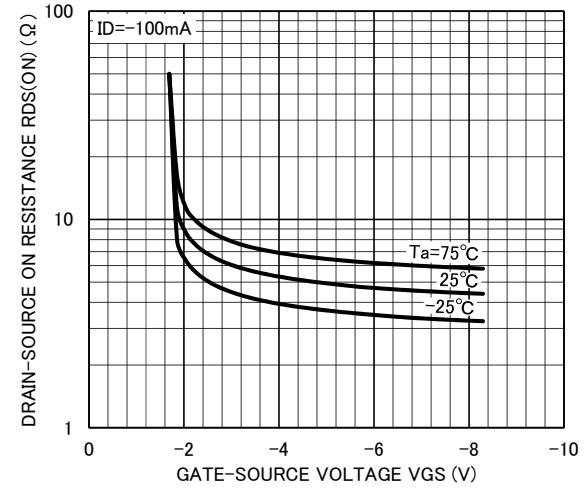
|Yfs|-ID



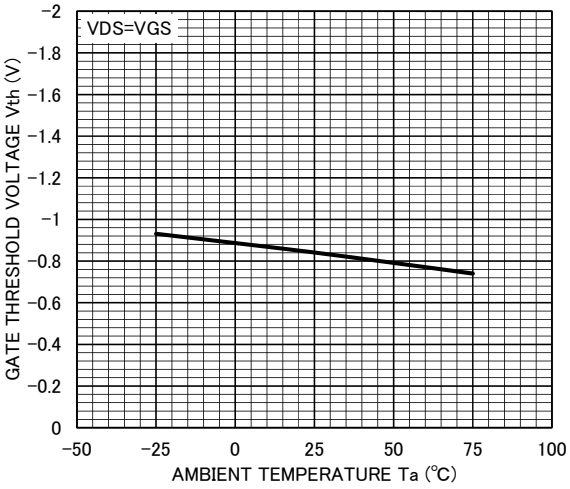
RDS(ON)-ID



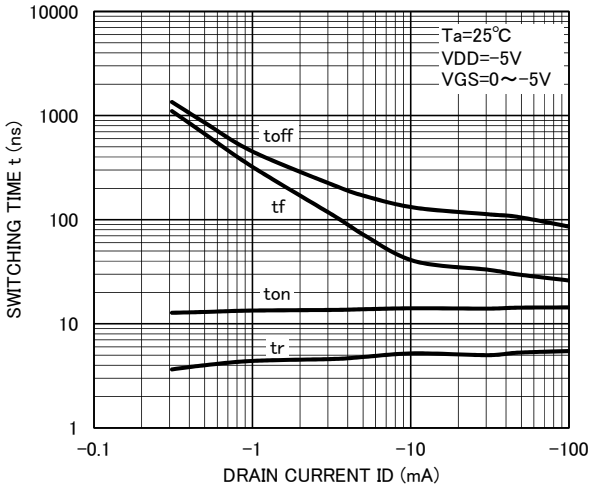
RDS(ON)-VGS



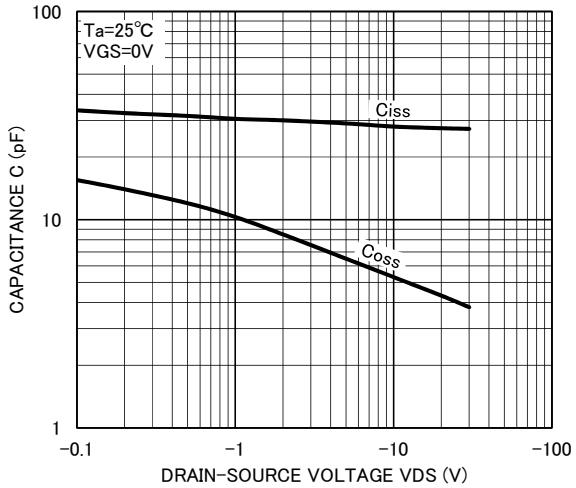
Vth-Ta



t-ID

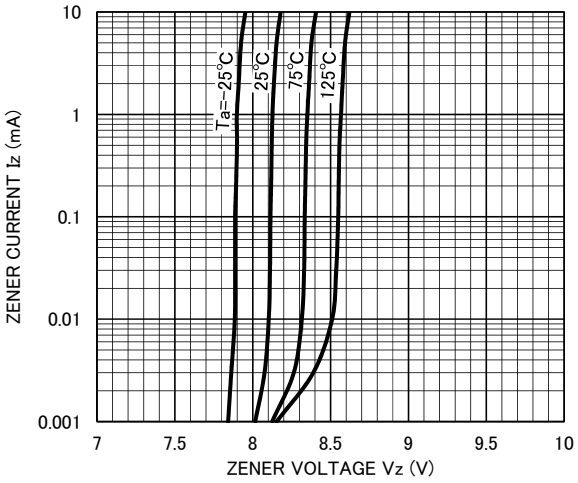


C-VDS

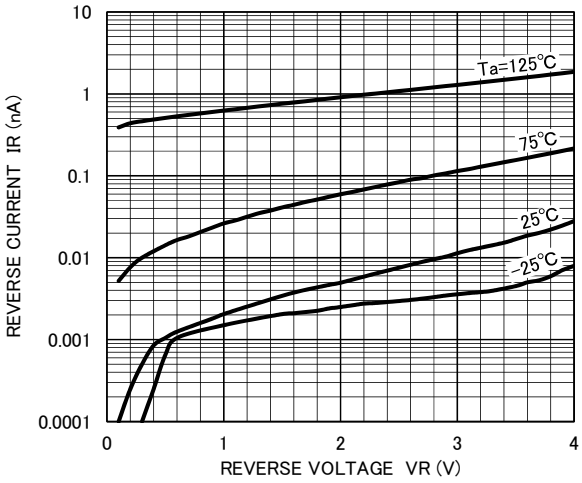


【Di】TYPICAL CHARACTERISTICS

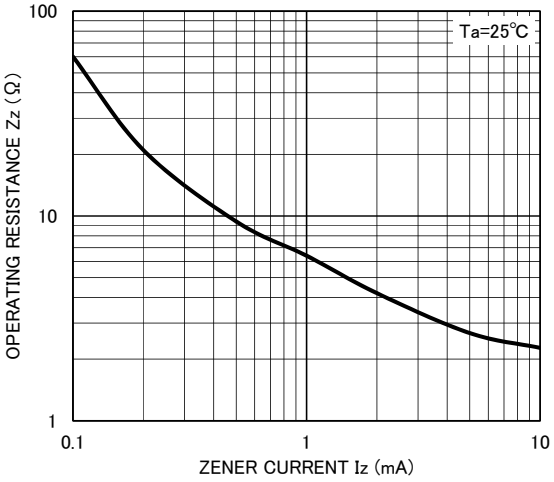
Iz-Vz



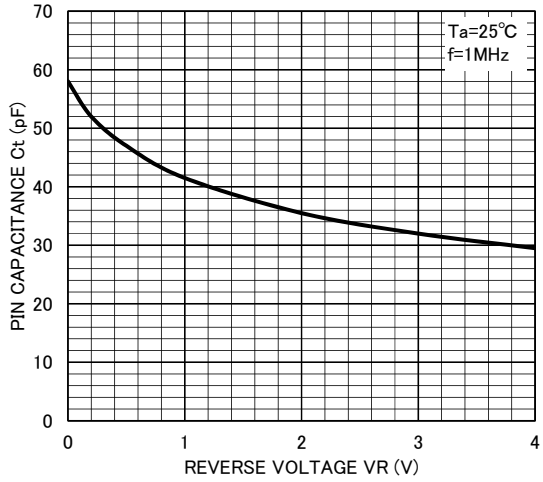
IR-VR



Zz-Iz



Ct-VR



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