

MA10705

Silicon epitaxial planer type

For high-frequency rectification

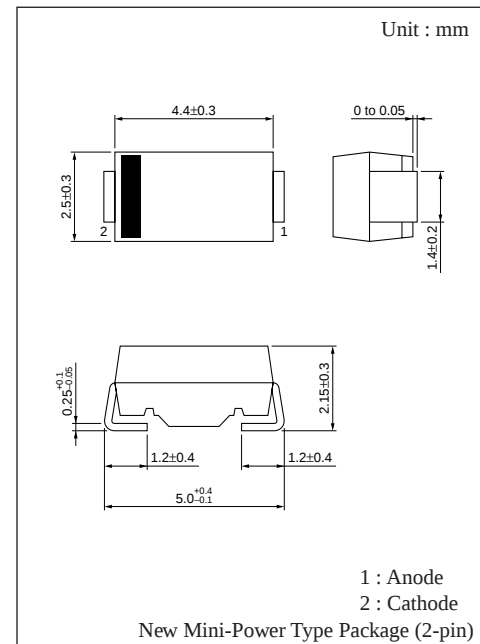
■ Features

- New Mini-Power type package (2-pin)
- $I_{F(AV)}=1.5\text{A}$ rectification possible
- Low V_F (forward voltage) type : $V_F < 0.37\text{V}$ (at $I_F=1.0\text{A}$)

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

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	30	V
Repetitive peak reverse voltage	V_{RRM}	30	V
Average forward current	$I_{F(AV)}$	1.5	mA
Non-repetitive peak forward surge current	I_{FSM}^*	30	A
Junction temperature	T_j	-40 to +125	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +125	$^\circ\text{C}$

* 50Hz sine wave, one-cycle wave, high value (non-repetitive)



Marking Symbol : PK

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

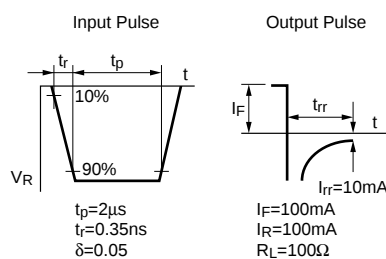
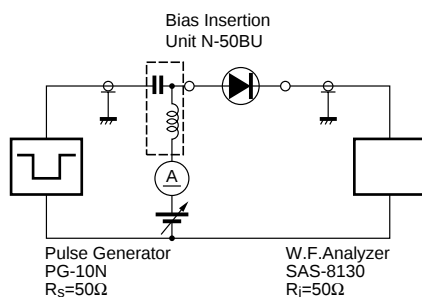
Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	I_R	$V_R=30\text{V}$			3	mA
Forward voltage (DC)	V_F	$I_F=1.0\text{A}$			0.37	V
Terminal capacitance	C_t	$V_R=10\text{V}$, $f=1\text{MHz}$		90		pF
Reverse recovery time	$t_{rr}^{*1,2}$	$I_F=I_R=100\text{mA}$ $I_{tr}=0.1 \cdot I_R$, $R_L=100\Omega$			50	ns

Note 1. Schottky barrier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on charge of a human body and leakage from the equipment used.

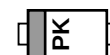
2. Rated input/output frequency : 20MHz

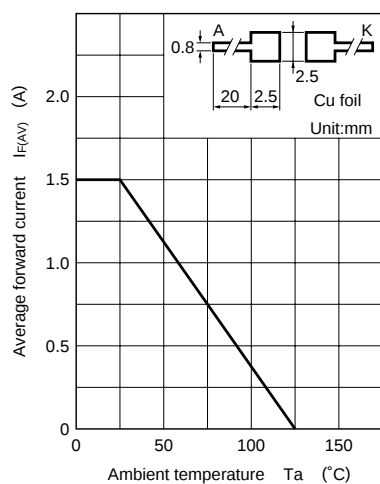
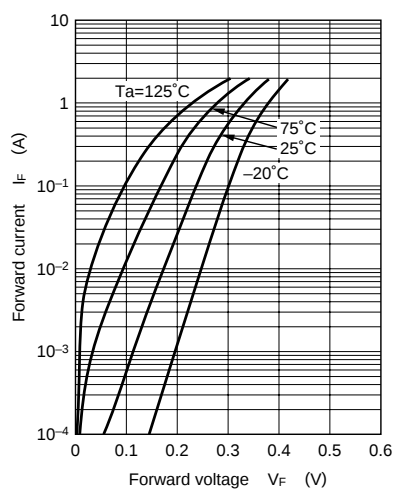
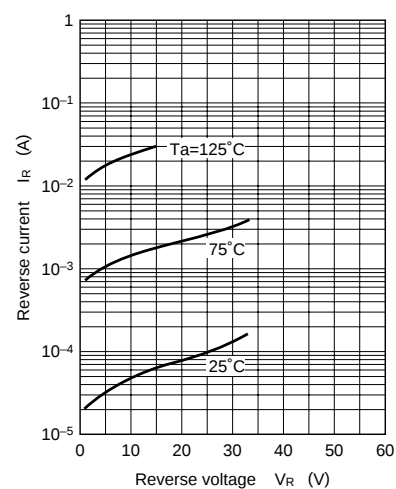
3. *1 Achieved with a printed-circuit board (glass epoxy)

*2 t_{rr} measuring circuit



■ Marking



$I_{F(AV)} - T_a$  $I_F - V_F$  $I_R - V_R$  $C_t - V_R$ 