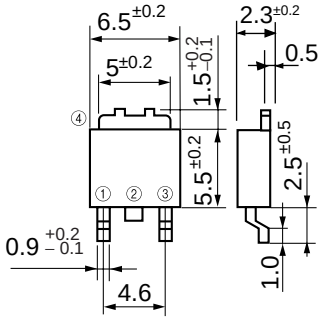
KS923C2 (5A) (200V / 5A)

LOW LOSS SUPER HIGH SPEED RECTIFIER

■ Outline drawings, mm

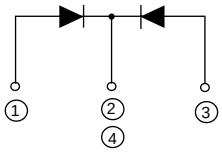


JEDEC	———
EIAJ	———

■ Features

- Surface-mount device
- Low V_F
- Super high speed switching
- High reliability by planer design

■ Connection diagram



■ Applications

- High speed power switching

■ Maximum ratings and characteristics

● Absolute maximum ratings

Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}		200	V
Non-repetitive peak reverse voltage	V_{RSM}	t=500ns, duty=1/40	200	V
Average output current	I_O	Square wave, duty=1/2, Tc=103°C	5*	A
Surge current	I_{FSM}	Sine wave 10ms	50	A
Operating junction temperature	T_j		-40 to +150	°C
Storage temperature	T_{stg}		-40 to +150	°C

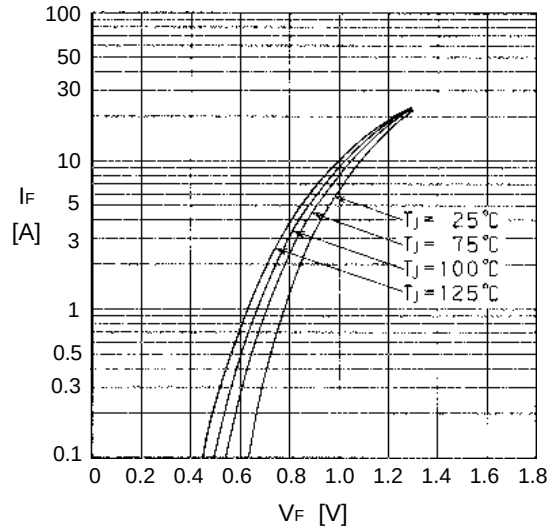
*Average forward current of centertap full wave connection

● Electrical characteristics (Ta=25°C Unless otherwise specified)

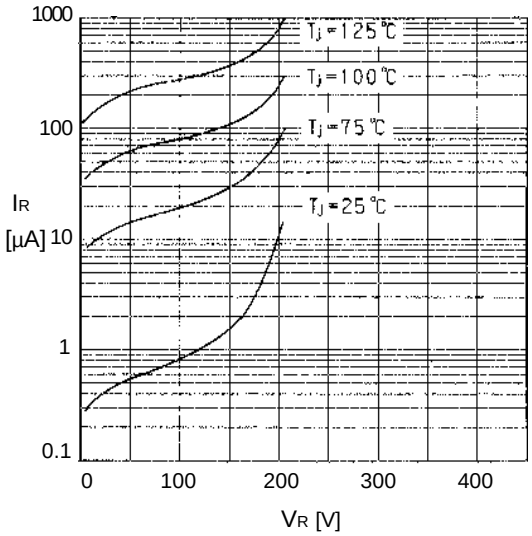
Item	Symbol	**Conditions**	**Max.**	Unit
Forward voltage drop	V_{FM}	I_{FM}=2.5A	0.95	V
Reverse current	I_{RRM}	$V_R=V_{RRM}$	100	μA
Reverse recovery time	t rr	I_F=0.1A, I_R=0.2A	35	ns
Thermal resistance	$R_{th(j-c)}$	Junction to case	10*	°C/W

■ Characteristics

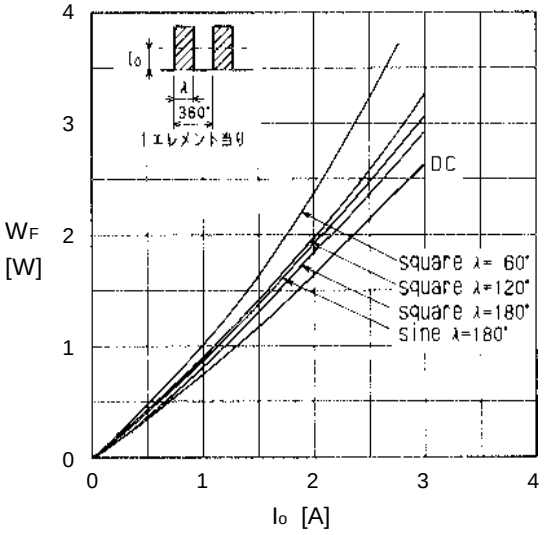
Forward characteristics



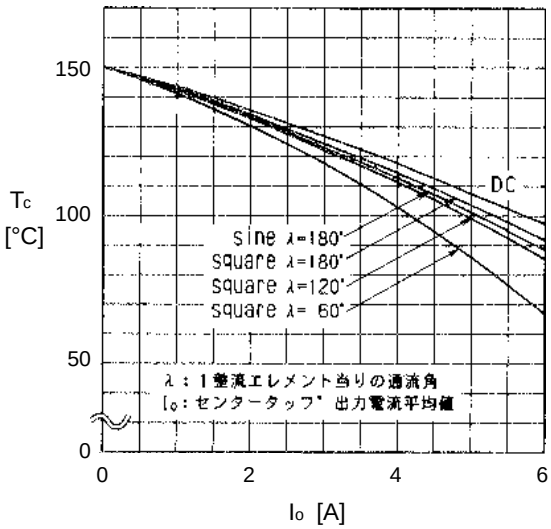
Reverse characteristics



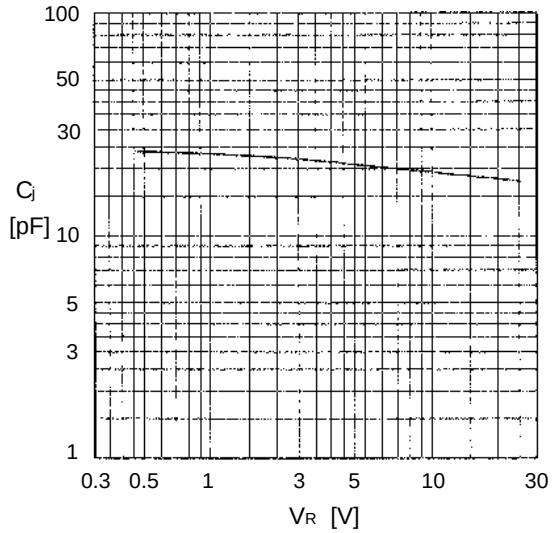
Forward power dissipation



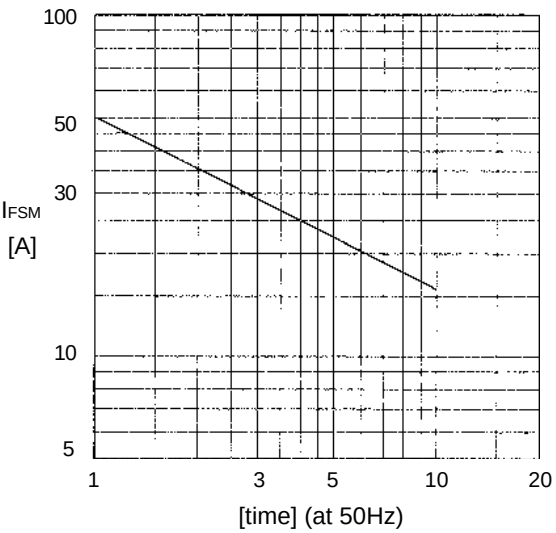
Output current-case temperature

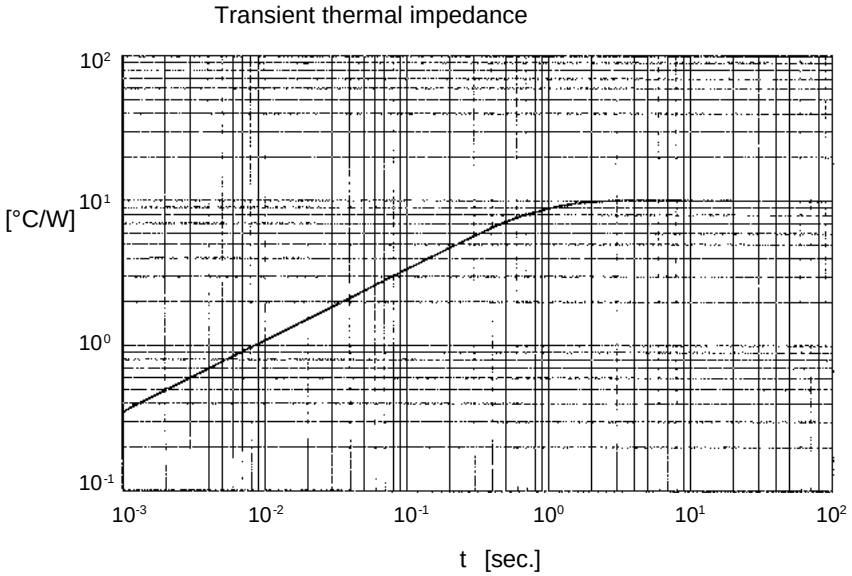


Junction capacitance characteristics



Surge capability




Transient thermal impedance
[°C/W]
10^2
10^1
10^0
10^-1
10^-3
10^-2
10^-1
10^0
10^1
10^2
t [sec.]