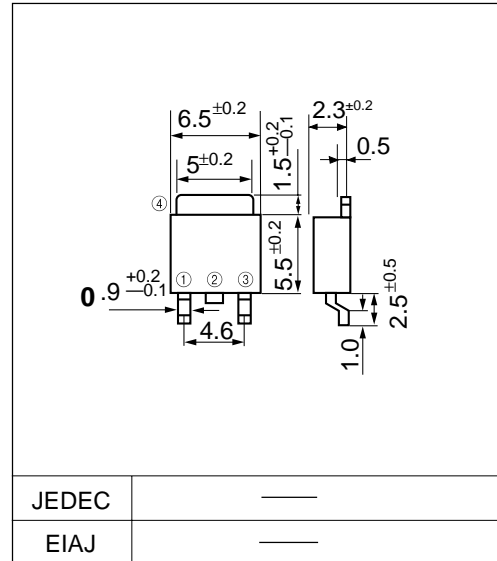


# KS823C09 (5A)

(90V / 5A )

## SCHOTTKY BARRIER DIODE

### ■ Outline drawings, mm



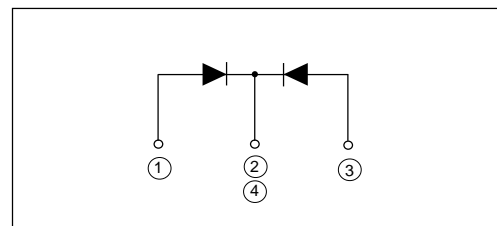
### ■ Features

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

### ■ Applications

- High speed power switching

### ■ Connection diagram



### ■ Maximum ratings and characteristics

- Absolute maximum ratings

Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	$V_{RRM}$		90	V
Non-repetitive peak reverse voltage	$V_{RSM}$	$t_w=500ns$ , duty=1/40	90	V
Average output current	$I_o$	Square wave, duty=1/2 $T_c=100^{\circ}C$	5.0*	A
Surge current	$I_{FSM}$	Sine wave 10ms	60	A
Operating junction temperature	$T_j$		-40 to +150	$^{\circ}C$
Storage temperature	$T_{stg}$		-40 to +150	$^{\circ}C$

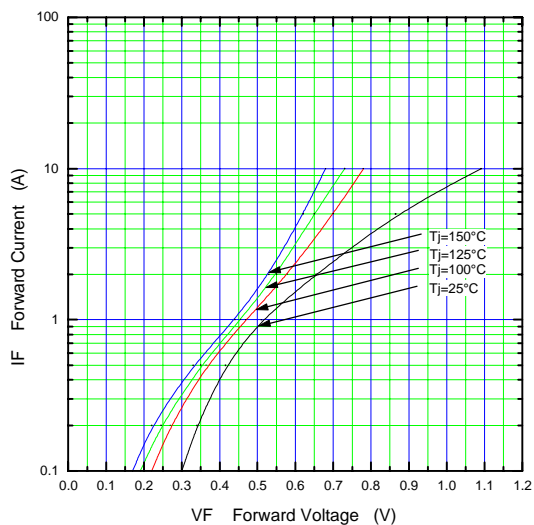
\* Average forward current of centertap full wave connection

- Electrical characteristics ( $T_a=25^{\circ}C$  Unless otherwise specified )

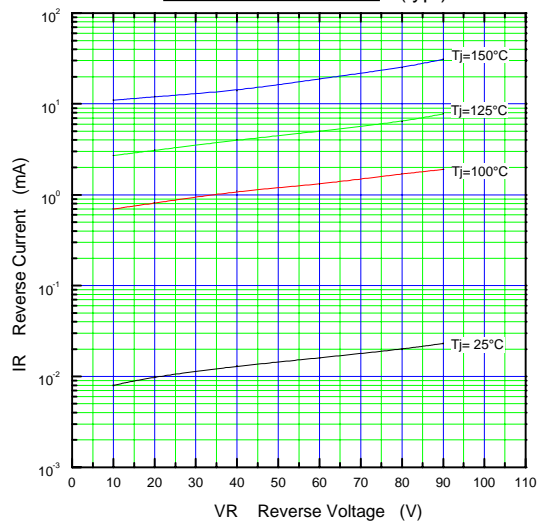
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	$V_{FM}$	$I_{FM}=2.5A$	0.9	V
Reverse current	$I_{RRM}$	$V_R=V_{RRM}$	5.0	mA
Thermal resistance	$R_{th(j-c)}$	Junction to case	10	$^{\circ}C/W$

■ Characteristics

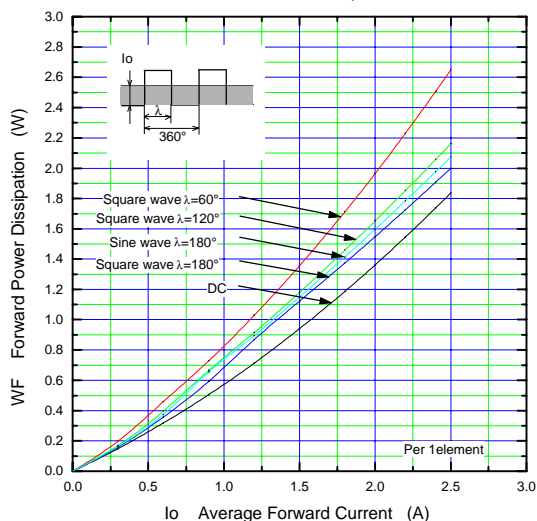
Forward Characteristic (typ.)



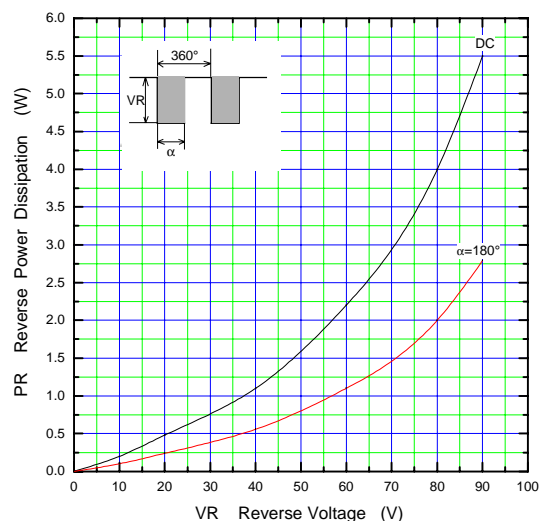
Reverse Characteristic (typ.)



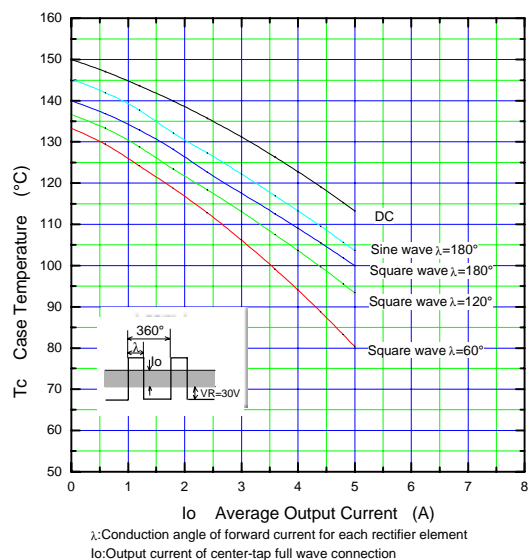
Forward Power Dissipation



Reverse Power Dissipation



Current Derating ( $I_o$ - $T_c$ )



Junction Capacitance Characteristic (typ.)

