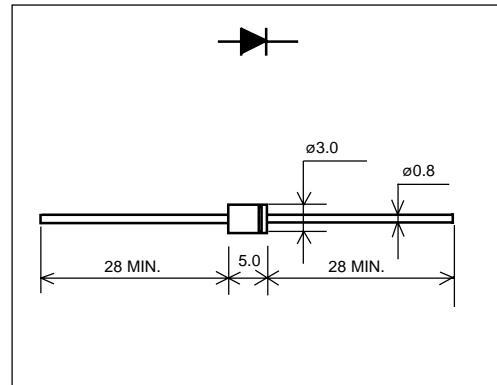


# ERB37 (1.0A)

( 800 to 1000V / 1.0A )

## FAST RECOVERY DIODE

### ■ Outline drawings, mm



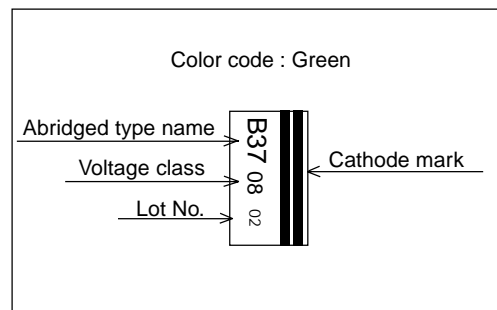
### ■ Features

- Super high speed switching
- Low  $V_F$  in turn on
- High reliability

### ■ Applications

- High speed switching

### ■ Marking



### ■ Maximum ratings and characteristics

- Absolute maximum ratings

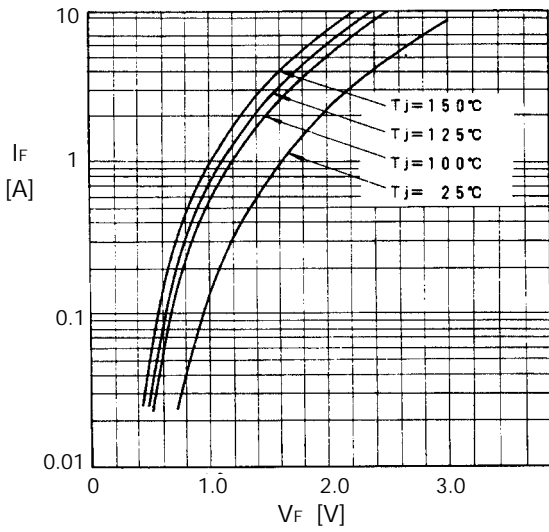
Item	Symbol	Conditions	Rating		Unit
			-08	-10	
Repetitive peak reverse voltage	$V_{RRM}$		800	1000	V
Non-repetitive peak reverse voltage	$V_{RSM}$		800	1000	V
Average forward current	$I_{F(AV)}$	Resistive load ( $T_I = 125^\circ\text{C}$ )	1.0		A
Surge current	$I_{FSM}$	Sine wave 10ms	30		A
Operating junction temperature	$T_j$		-40 to +150		$^\circ\text{C}$
Storage temperature	$T_{stg}$		-40 to +150		$^\circ\text{C}$

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

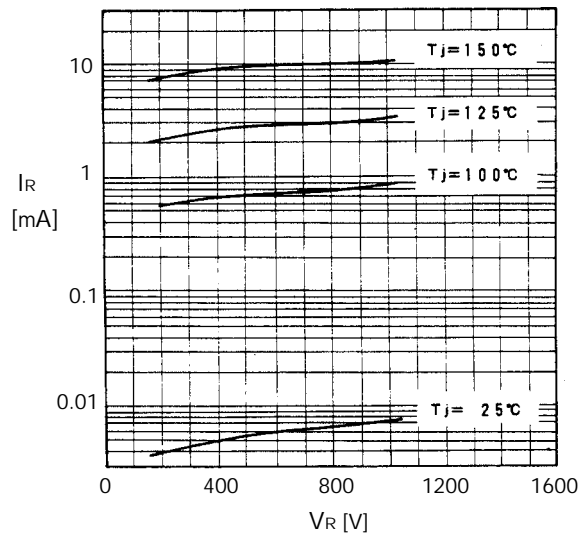
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	$V_{FM}$	$I_{FM} = 1.0\text{A}$	3.0	V
Reverse current	$I_{RRM}$	$V_R = V_{RRM}$	10	$\mu\text{A}$
Reverse recovery time	$t_{rr}$	$I_F = 0.1\text{A}, I_R = 0.1\text{A}$	250	ns

■ Characteristics

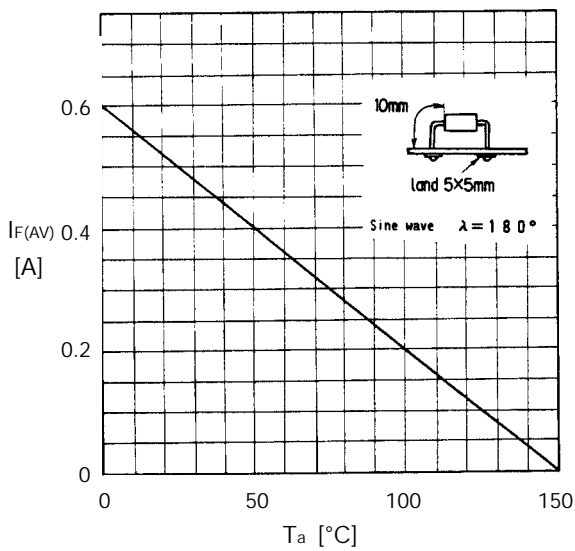
Forward characteristics



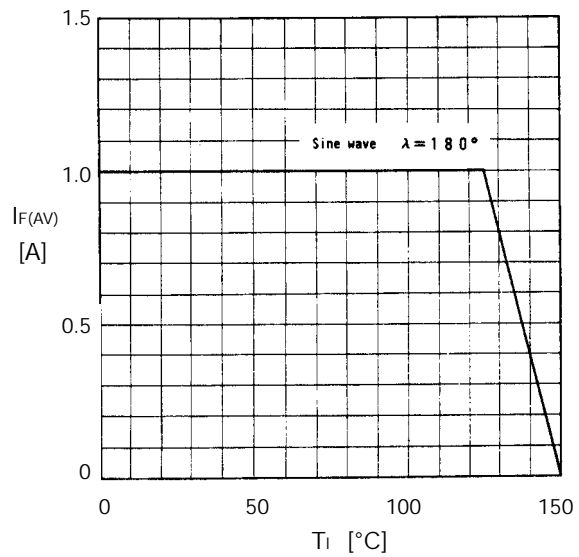
Reverse characteristics



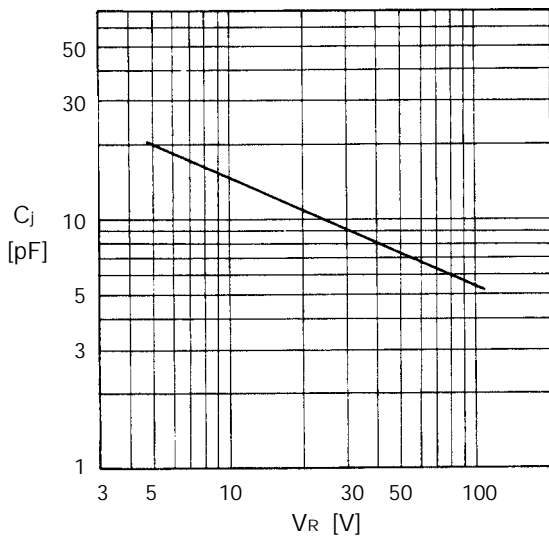
Current derating ( $I_{F(AV)}-T_a$ )



Current derating ( $I_{F(AV)}-T_l$ )



Junction capacitance characteristics



Surge capability

