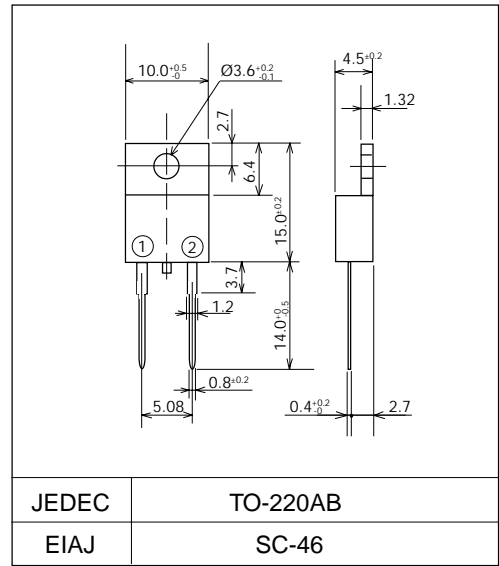


# ERC20 (5A)

( 200V to 800V / 5A )

## FAST RECOVERY DIODE

### ■ Outline drawings, mm



### ■ Features

- High voltage by mesa design
- High reliability

### ■ Applications

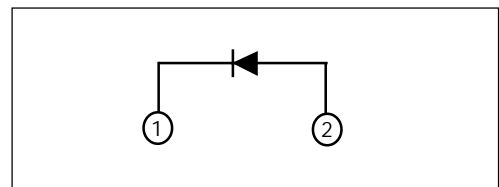
- High speed switching

### ■ Maximum ratings and characteristics

- Absolute maximum ratings

Item	Symbol	Conditions	Rating				Unit
			-02	-04	-06	-08	
Repetitive peak reverse voltage	$V_{RRM}$		200	400	600	800	V
Non-repetitive peak reverse voltage	$V_{RSM}$		250	450	650	850	V
Average output current	$I_o$	Square wave, duty=1/2, $T_c=125^\circ\text{C}$	5				A
Surge current	$I_{FSM}$	Sine wave 10ms	70				A
Operating junction temperature	$T_j$		-40 to +150				$^\circ\text{C}$
Storage temperature	$T_{stg}$		-40 to +150				$^\circ\text{C}$

### ■ Connection diagram

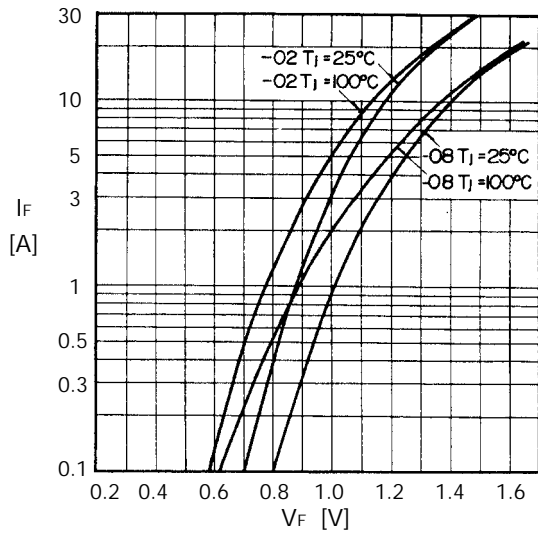


- Electrical characteristics ( $T_a=25^\circ\text{C}$  Unless otherwise specified)

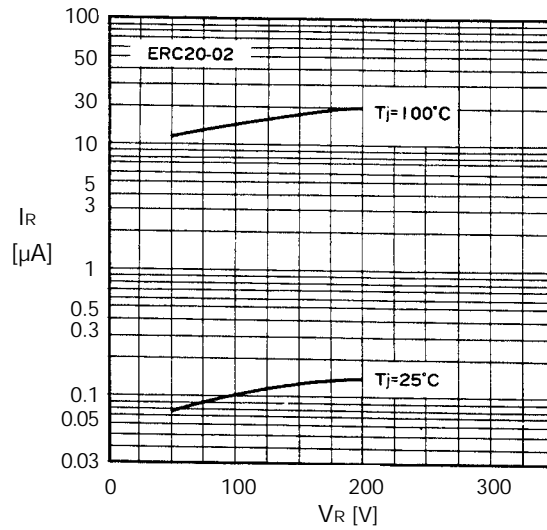
Item	Symbol	Conditions	Max.				Unit
			-02	-04	-06	-08	
Forward voltage drop	$V_{FM}$	$I_{FM}=5.0\text{A}$	1.3		1.5		V
Reverse current	$I_{RRM}$	$V_R=V_{RRM}$	50				$\mu\text{A}$
Reverse recovery time	$t_{rr}$	$I_F=0.1\text{A}$ , $I_R=0.1\text{A}$	400				ns
Thermal resistance	$R_{th(j-c)}$	Junction to case	3.0				$^\circ\text{C/W}$

■ Characteristics

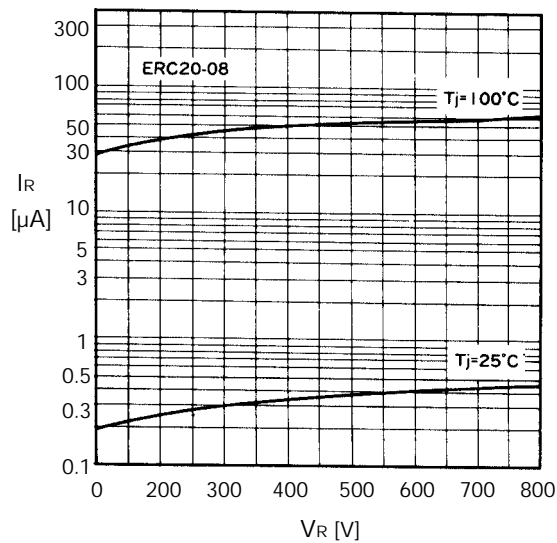
Forward characteristics



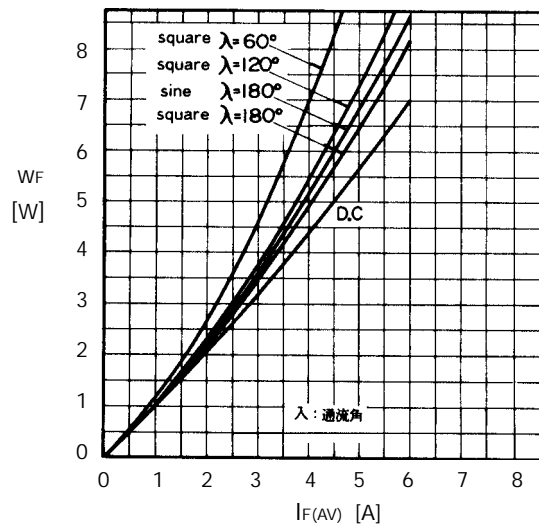
Reverse characteristics



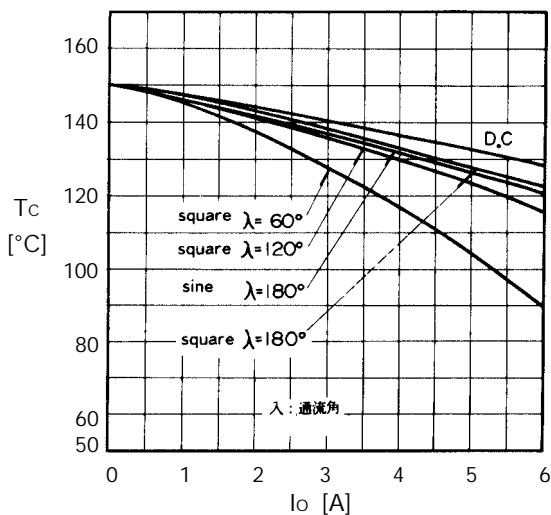
Reverse characteristics



Forward power dissipation



Output current-case temperature



Junction capacitance characteristics

