

# ERC20 (5A)

( 200V to 800V / 5A )

## FAST RECOVERY DIODE

### Features

- High voltage by mesa design
- High reliability

### Applications

- High speed switching

### Maximum ratings and characteristics

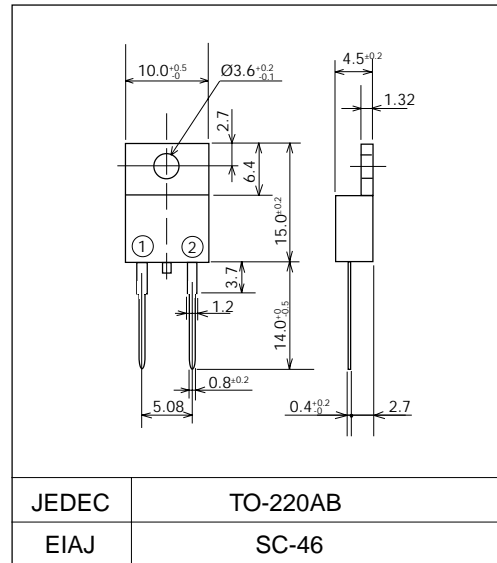
- Absolute maximum ratings

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, $T_c=125^{\circ}C$	5				A
Surge current	$I_{FSM}$	Sine wave 10ms	70				A
Operating junction temperature	$T_j$		-40 to +150				$^{\circ}C$
Storage temperature	$T_{stg}$		-40 to +150				$^{\circ}C$

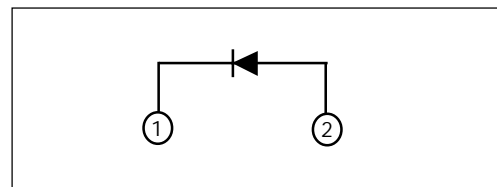
- Electrical characteristics ( $T_a=25^{\circ}C$  Unless otherwise specified )

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

### Outline drawings, mm

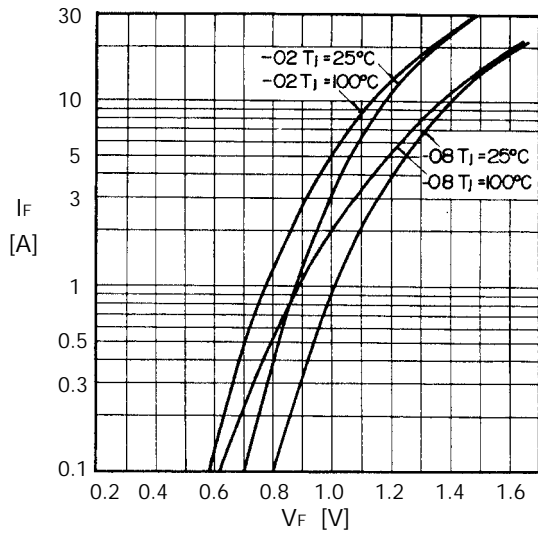


### Connection diagram

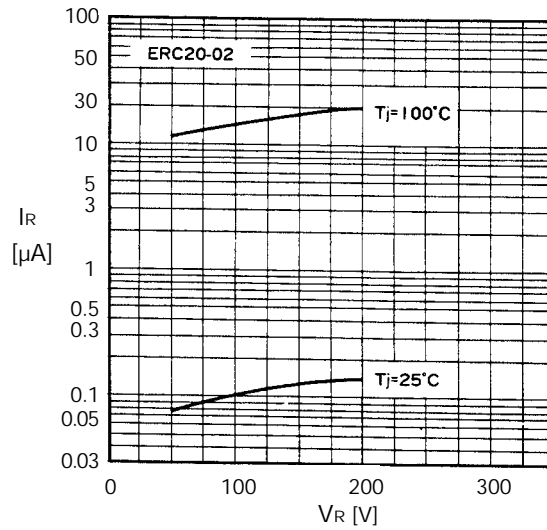


■ Characteristics

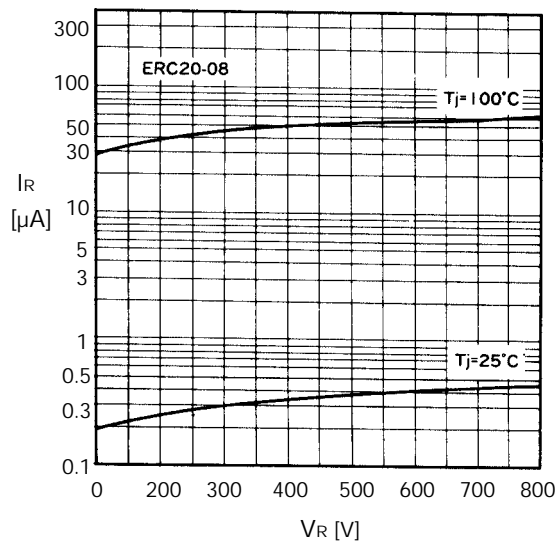
Forward characteristics



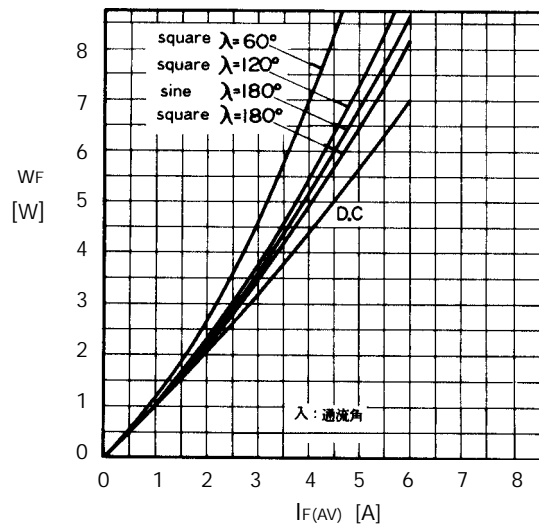
Reverse characteristics



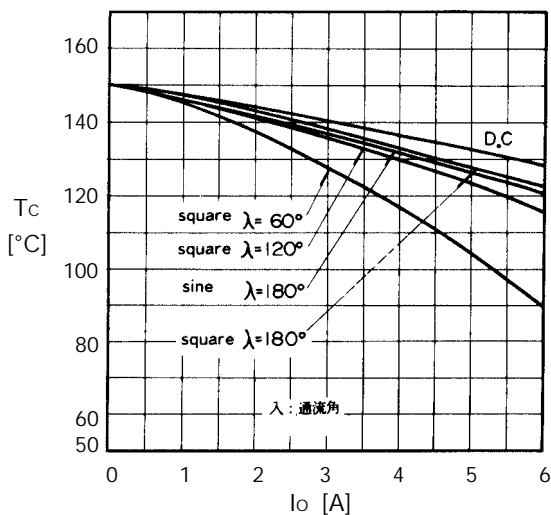
Reverse characteristics



Forward power dissipation



Output current-case temperature



Junction capacitance characteristics

