

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

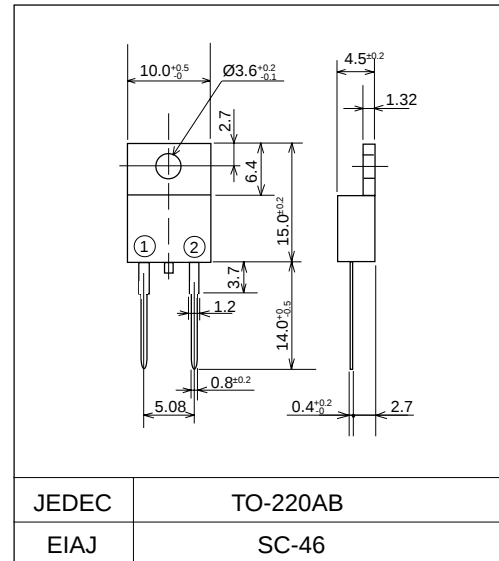
- Absolute maximum ratings

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, $T_c=125^{\circ}\text{C}$	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				$^{\circ}\text{C}$

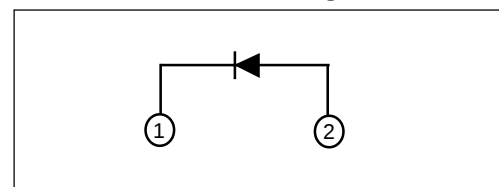
- Electrical characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Conditions	Max.				Unit
			-02	-04	-06	-08	
Forward voltage drop	V _{FM}	I _{FM} =5.0A	1.3		1.5		V
Reverse current	I _{RRM}	V _R =V _{RRM}	50				μA
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				°C/W

Outline drawings, mm

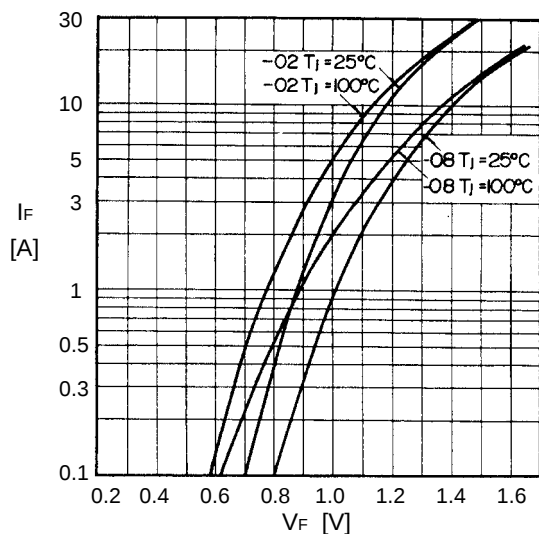


Connection diagram

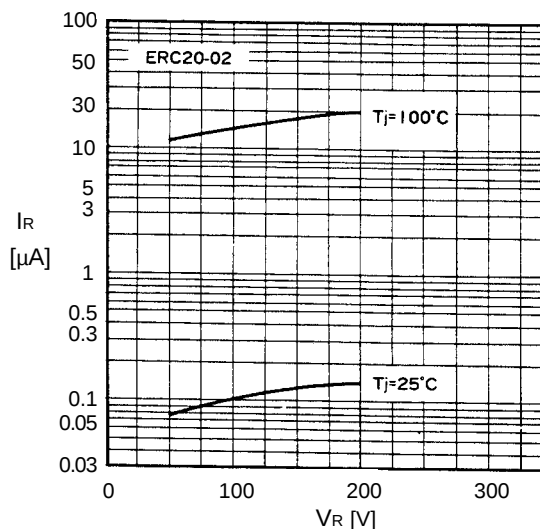


Characteristics

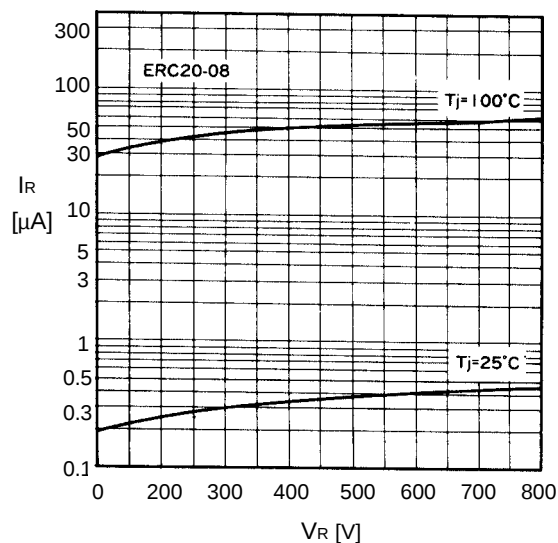
Forward characteristics



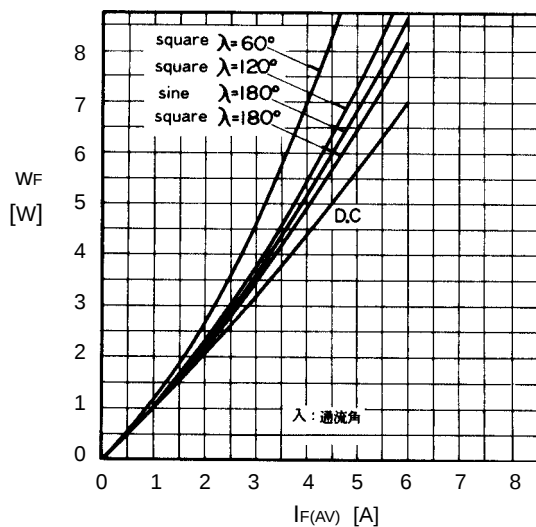
Reverse characteristics



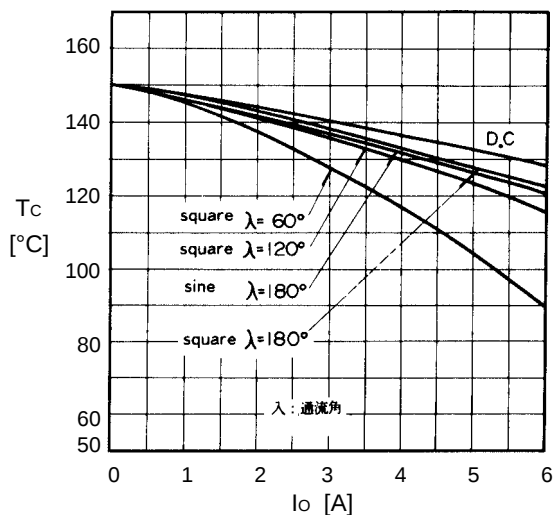
Reverse characteristics



Forward power dissipation



Output current-case temperature



Junction capacitance characteristics

