

ESC021M-15 (5A) (1500V / 5A, 600V / 5A)

FAST RECOVERY DIODE

Features

- Damper diode for high definition T.V. and high resolution display
- Damper and modulator diode are jointed in a body
- Insulated package by fully molding
- High voltage by mesa design
- High reliability

Applications

- Horizontal deflection circuit

Maximum ratings and characteristics

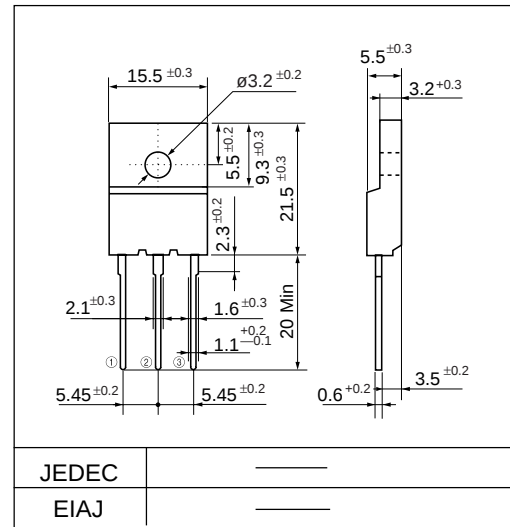
- Absolute maximum ratings

Item	Symbol	Conditions	Rating		Unit
			① to ②	② to ③	
Repetitive peak reverse voltage	V_{RRM}		600	1500	V
Non-repetitive peak reverse voltage	V_{RSM}		600	1500	V
Average output current	I_o	Square wave, duty=1/2, $T_c = 90^{\circ}\text{C}$	5.0		A
Surge current	I_{FSM}	Sine wave 10ms	50	50	A
Operating junction temperature	T_j		-40 to +150		$^{\circ}\text{C}$
Storage temperature	T_{stg}		-40 to +150		$^{\circ}\text{C}$

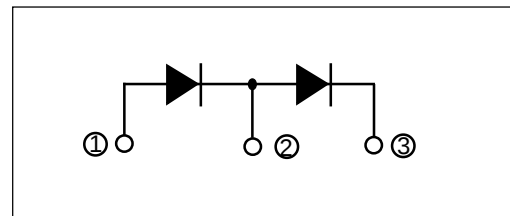
- Electrical characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Conditions	Max.		Unit
			① to ②	② to ③	
Forward voltage drop	V_{FM}	$I_{FM}=4\text{A}$	3.0	1.6	V
Reverse current	I_{RRM}	$V_R=V_{RRM}$	100	10	μA
Reverse recovery time	t_{rr}	$I_{FM}=0.1\text{A}$, $I_{RR}=0.1\text{A}$	0.15	2.2	μs
Thermal resistance	$R_{th(j-c)}$	Junction to case	2.5		$^{\circ}\text{C} / \text{W}$

Outline drawings, mm

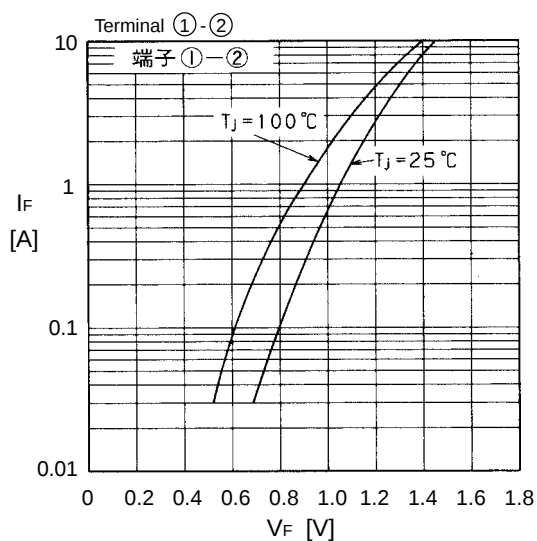


Connection Diagram

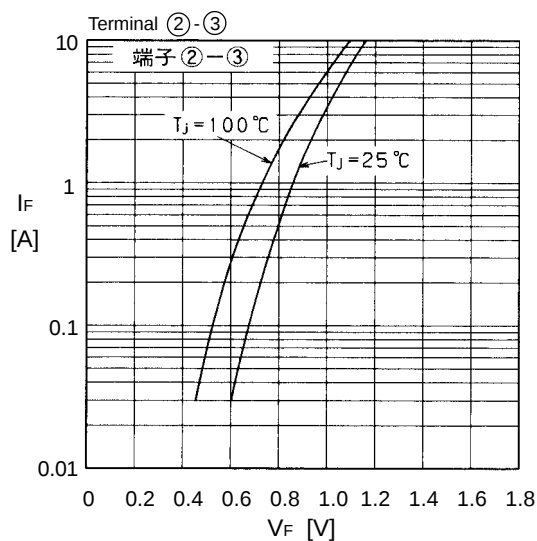


Characteristics

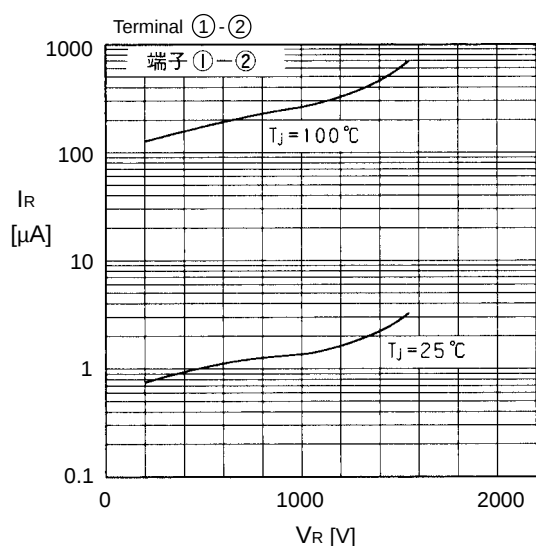
Forward characteristics



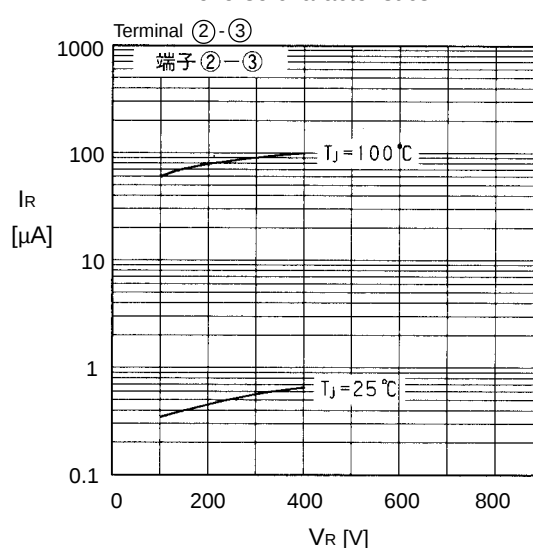
Forward characteristics



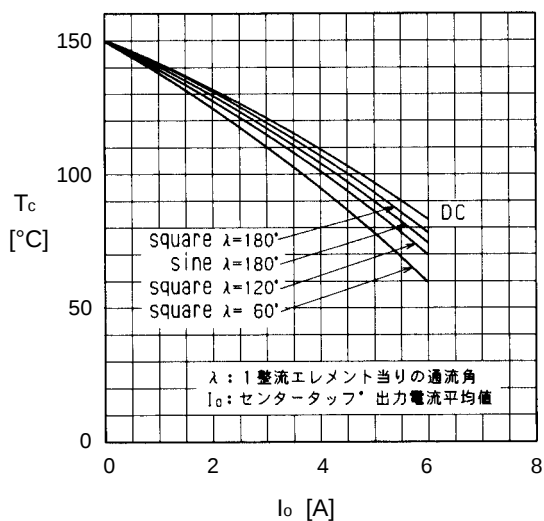
Reverse characteristics



Reverse characteristics

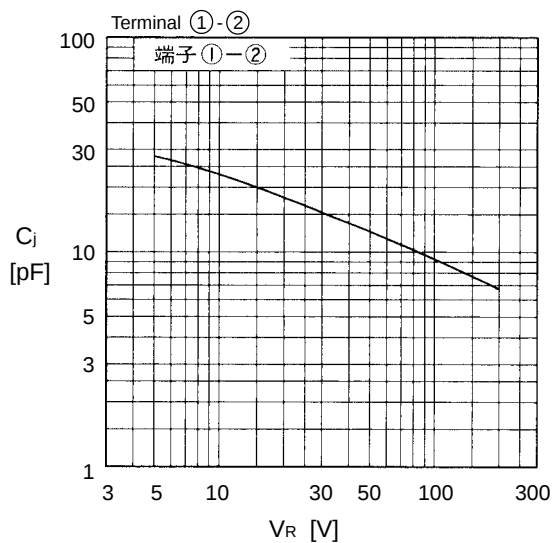


Output current - Case temperature

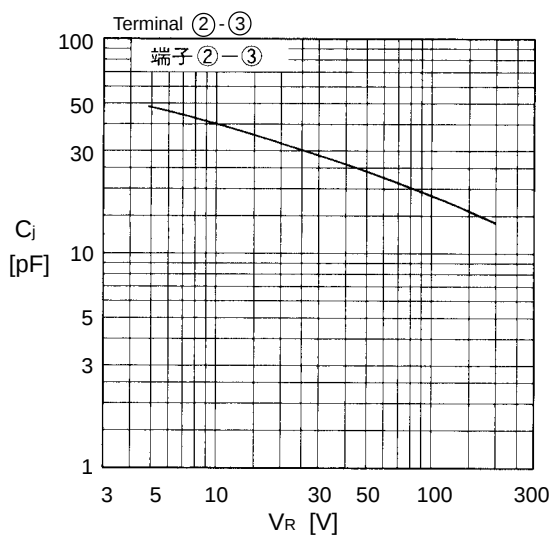


Characteristics

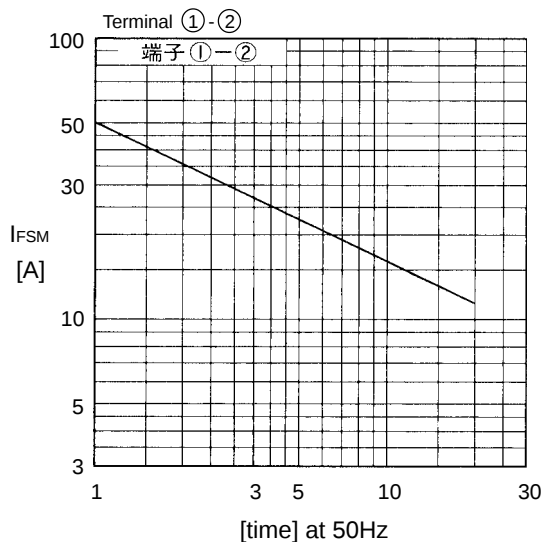
Junction capacitance characteristics



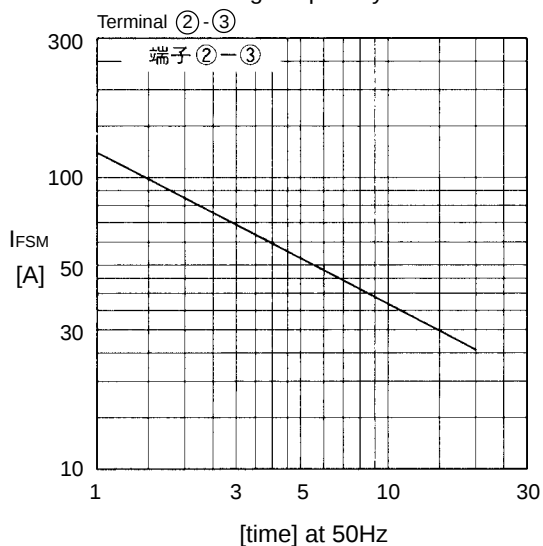
Junction capacitance characteristics



Surge capability



Surge capability



Transient thermal impedance

