

# ESCO23M-15 (5A)

( 600V,1500V / 5A )

## LOW LOSS SUPER HIGH SPEED RECTIFIER

### Features

- Insulated package by fully molding
- Low VF
- Super high speed switching
- High reliability by planer design

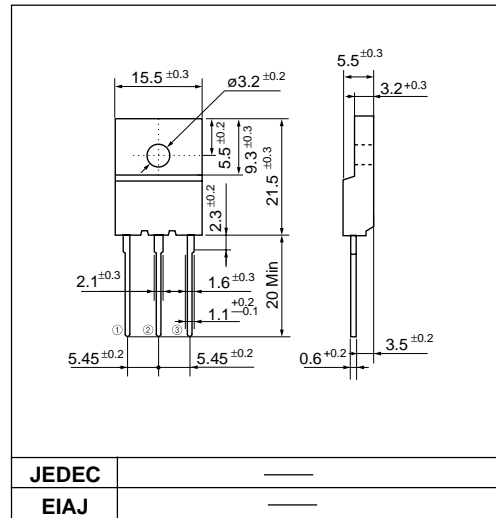
### Applications

- High speed power switching

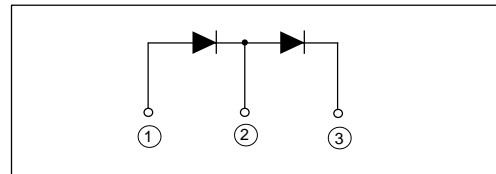
### Maximum ratings and characteristics

- Absolute maximum ratings

### Outline drawings, mm



### Connection diagram



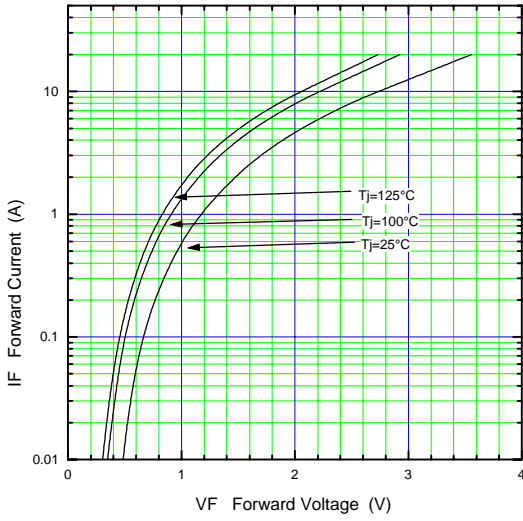
Item	Symbol	Conditions	Rating		Unit
			① to ②	② to ③	
Repetitive peak reverse voltage	$V_{RRM}$		600	1500	V
Repetitive peak surge reverse voltage	$V_{RSM}$		600	1500	V
Isolating voltage	$V_{iso}$	Terminals to Case, AC. 1min.	1500		V
Average output current	$I_o$	$T_c=100^{\circ}C$	5		A
Surge current	$I_{FSM}$	Sine wave 10ms	50	80	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 )

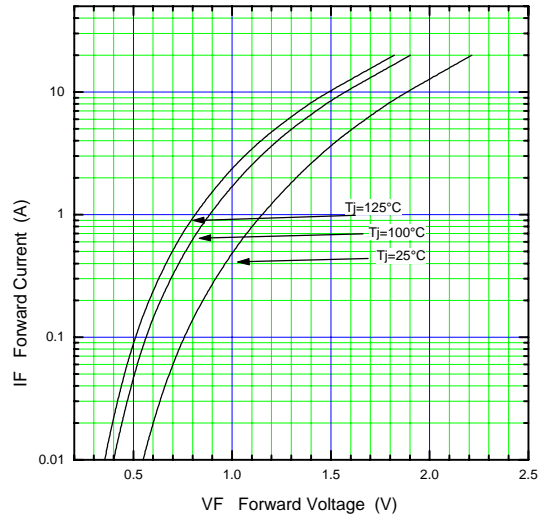
Item	Symbol	Conditions	Max.		Unit
			① to ②	② to ③	
Forward voltage drop	$V_{FM}$	$I_{FM}=4A$	3.0	1.8	V
Reverse current	$I_{RRM}$	$V_R=V_{RRM}$	500	50	$\mu A$
Reverse recovery time	$t_{rr}$	$I_F=0.1A, I_R=0.1A$	0.15	0.6	$\mu s$
Thermal resistance	$R_{th(j-c)}$	Junction to case	2.5		$^{\circ}C/W$

Characteristics

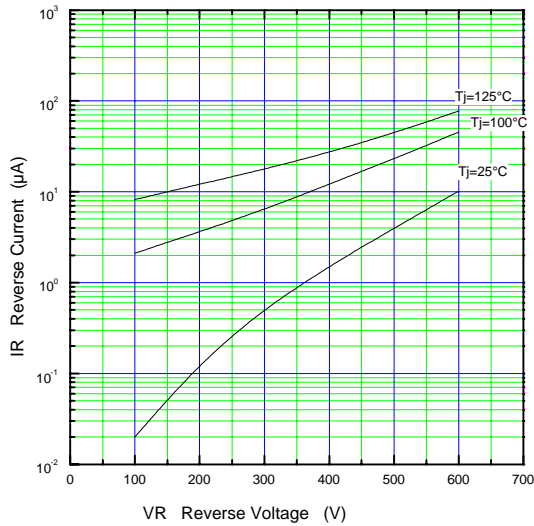
(1)-(2) Forward Characteristic (typ.)



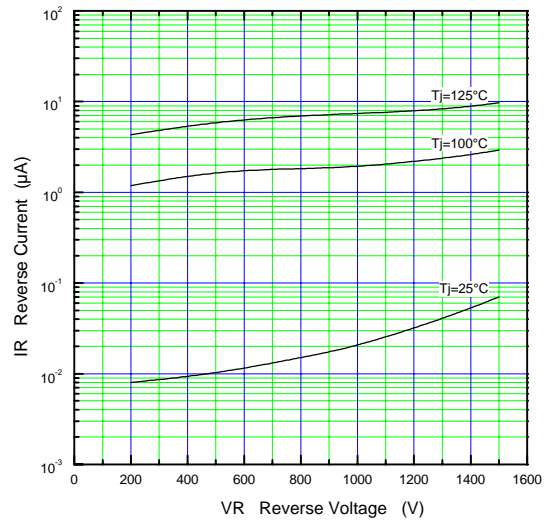
(2)-(3) Forward Characteristic (typ.)



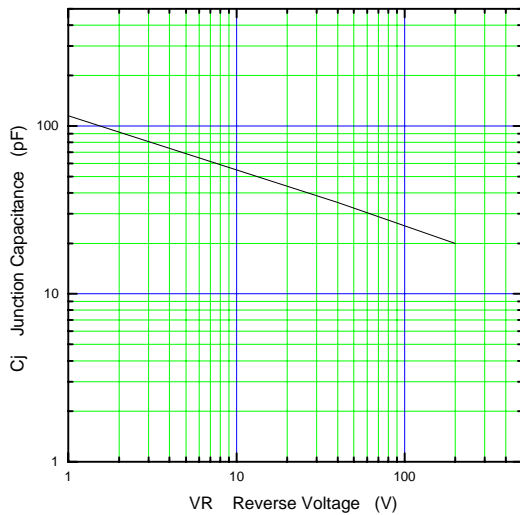
(1)-(2) Reverse Characteristic (typ.)



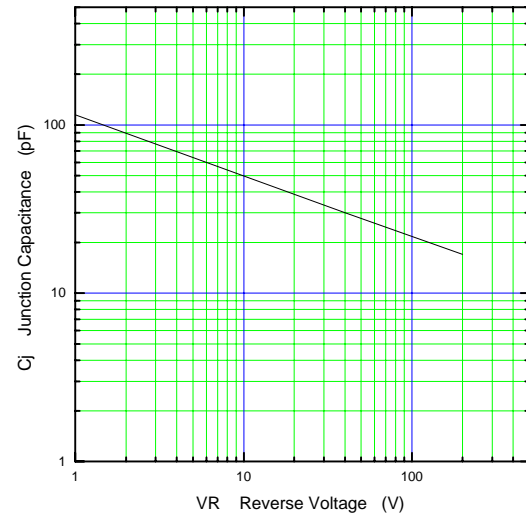
(2)-(3) Reverse Characteristic (typ.)



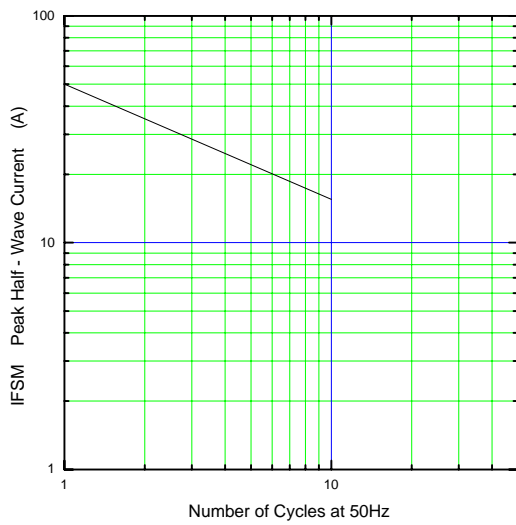
(1)-(2) Junction Capacitance Characteristic (typ.)



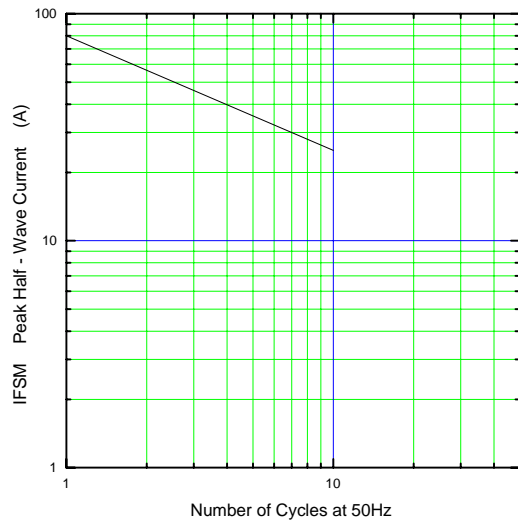
(2)-(3) Junction Capacitance Characteristic (typ.)



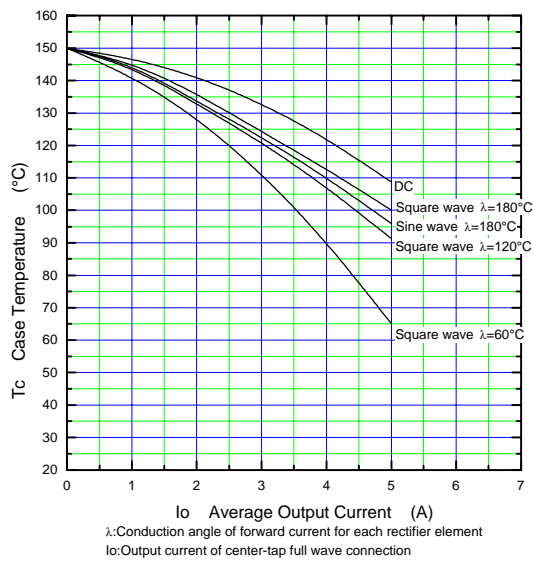
(1)-(2) Surge Capability



(2)-(3) Surge Capability



Current Derating (Io-Tc)



Transient Thermal Impedance

