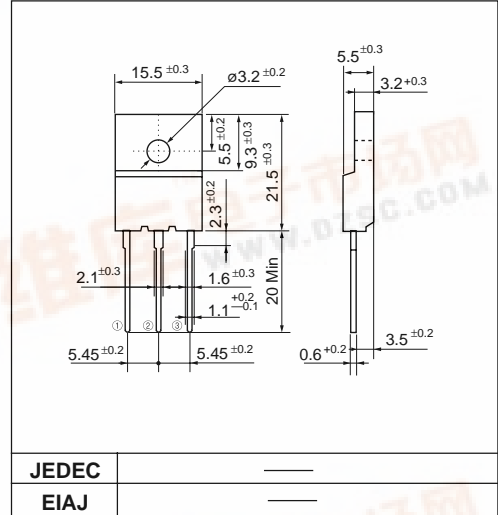


ESCO23M-15 (5A)

(600V,1500V / 5A)

LOW LOSS SUPER HIGH SPEED RECTIFIER

Outline drawings, mm



Features

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

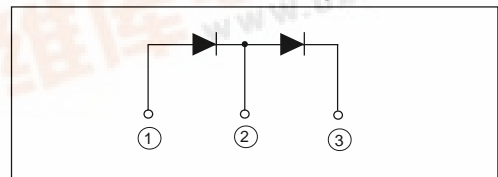
Applications

- High speed power switching

Maximum ratings and characteristics

- Absolute maximum ratings

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°C | 5 | | A |
| Surge current | I _{FSM} | Sine wave 10ms | 50 | 80 | A |
| Operating junction temperature | T _j | | -40 to +150 | | °C |
| Storage temperature | T _{stg} | | -40 to +150 | | °C |

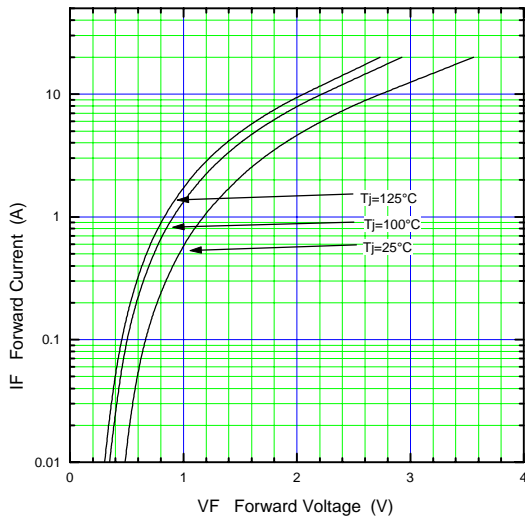
- Electrical characteristics (T_a=25°C Unless otherwise specified)

| 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 | μA |
| Reverse recovery time | t _{rr} | I _F =0.1A, I _R =0.1A | 0.15 | 0.6 | μs |
| Thermal resistance | R _{th(j-c)} | Junction to case | 2.5 | | °C/W |

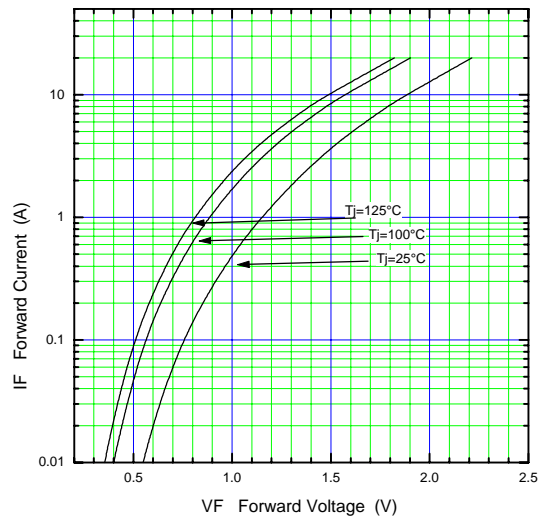


■ Characteristics

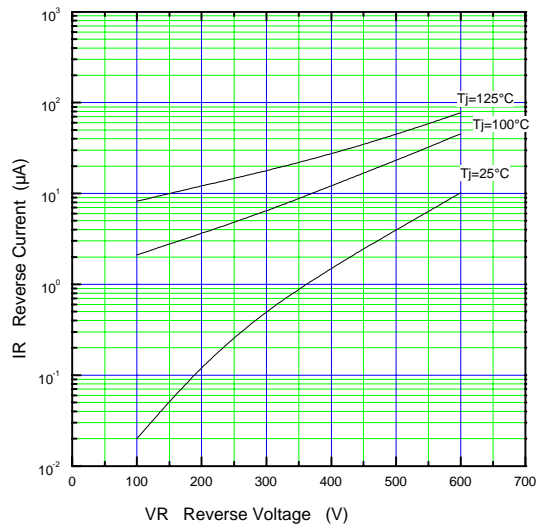
(1)-(2) Forward Characteristic (typ.)



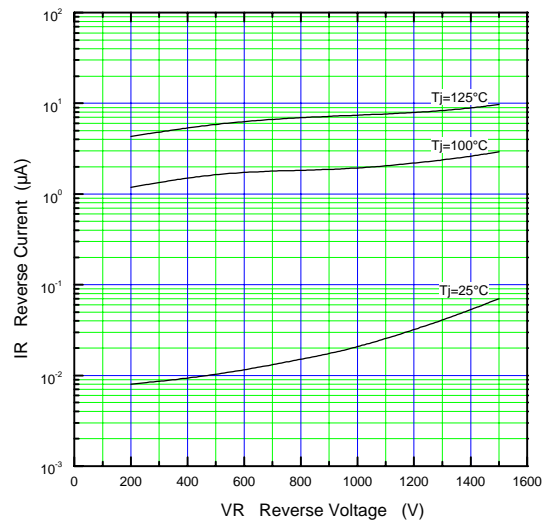
(2)-(3) Forward Characteristic (typ.)



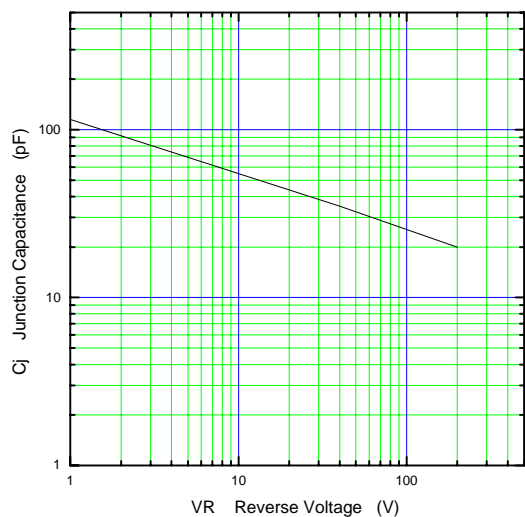
(1)-(2) Reverse Characteristic (typ.)



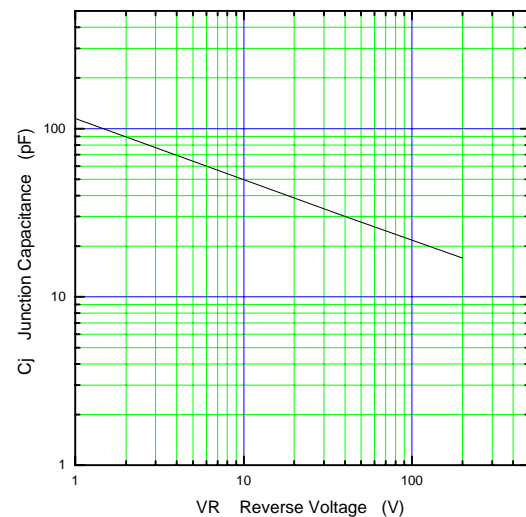
(2)-(3) Reverse Characteristic (typ.)



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



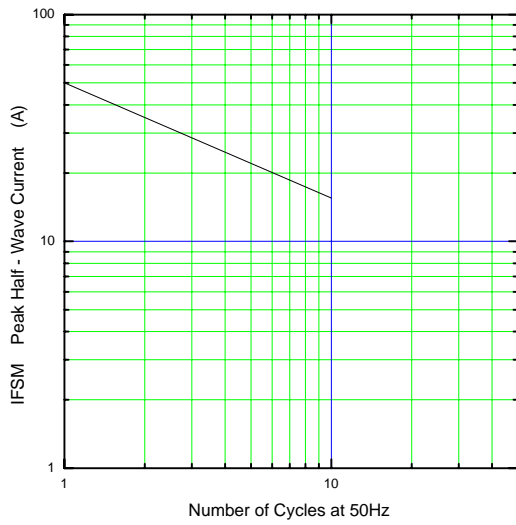
(2)-(3) Junction Capacitance Characteristic (typ.)



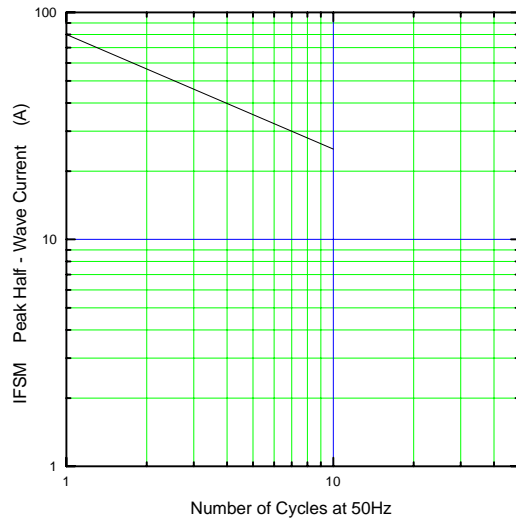
ESCO23M-15 (5A)

(600V,1500V / 5A)

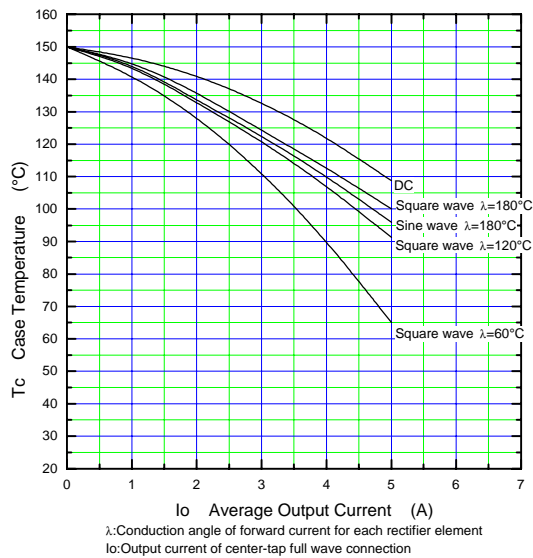
(1)-(2) Surge Capability



(2)-(3) Surge Capability



Current Derating (I_o - T_c)



Transient Thermal Impedance

