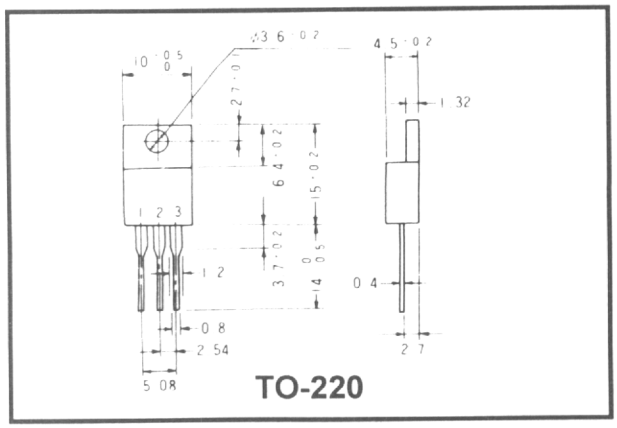
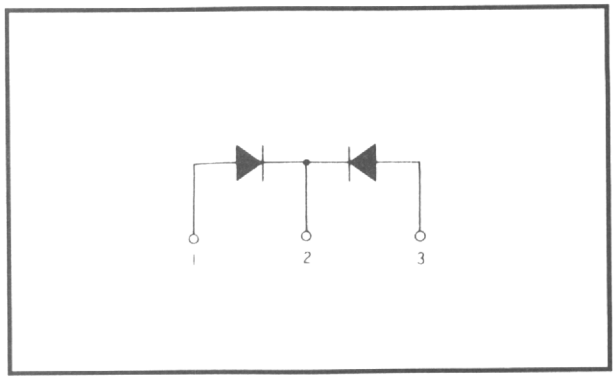
ESAC82-004K (15A)

SCHOTTKY BARRIER DIODE

Outline Drawing



Connection Diagram



Features

- Low V_F
- Super high speed switching
- High reliability by planer design

Applications

- High speed power switching

Maximum Ratings & Characteristics

- Absolute Maximum Ratings

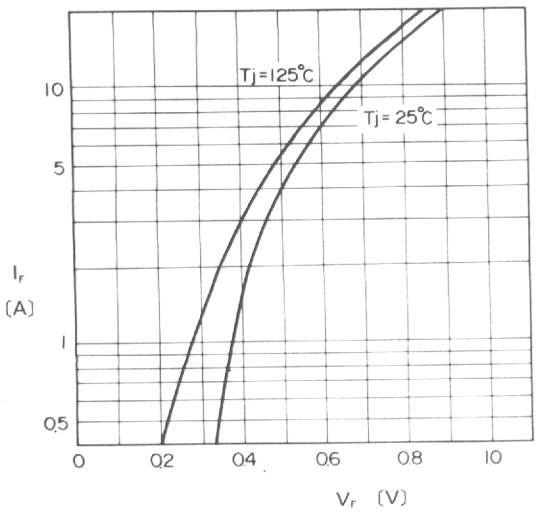
Items	Symbols	Conditions	Ratings	Units
Repetitive Peak Reverse Voltage	V_{RRM}		45	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	tw = 500ns, duty = 1/40	48	V
Average Forward Current	I_O	Tc = 90°C, duty 1/2, Square wave	15*	A
Surge Current	I_{FSM}	Sine Wave, 10ms	150	A
Operating Junction Temperature	T_J		-40 to +150	°C
Storage Temperature	T_{stg}		-40 to +150	°C

* Average forward current of centertap full wave connection

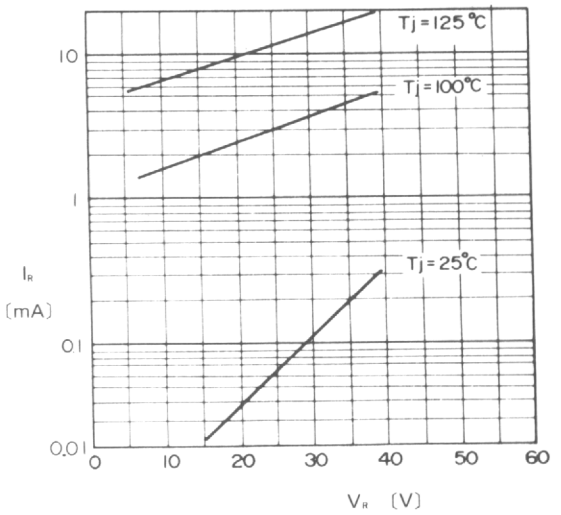
- Electrical Characteristics (Ta = 25°C Unless otherwise specified)

Items	Symbols	Conditions	Ratings	Units
Forward Voltage Drop	V_F	I_F = 7.5A	0.67	V
Reverse Current	I_R	$V_R = V_{RRM}$	1.0	mA
Thermal Resistance	$R_{th(j-c)}$	Junction to case	3.0	°C/W

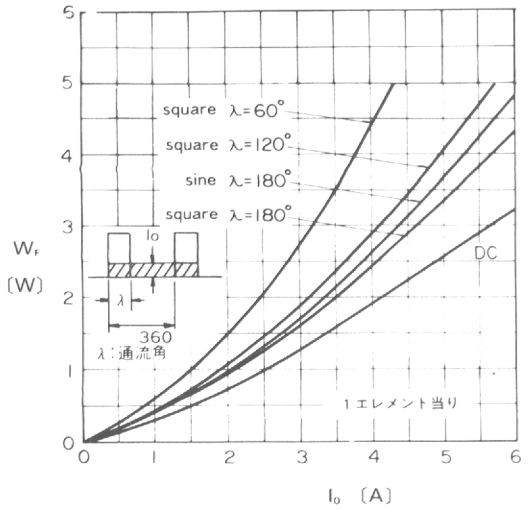
ESAC82-004K (15A)



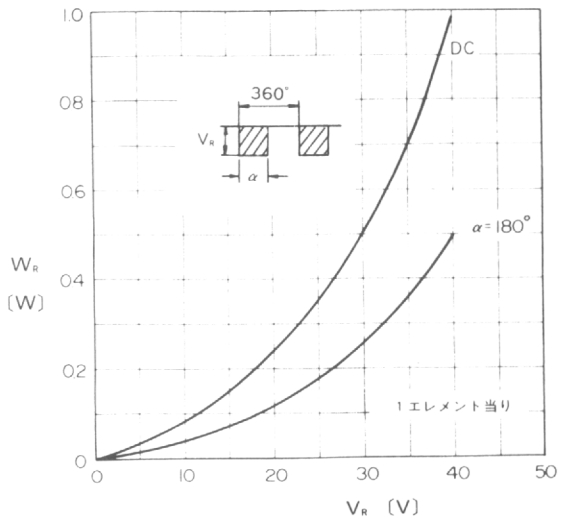
Forward Characteristics



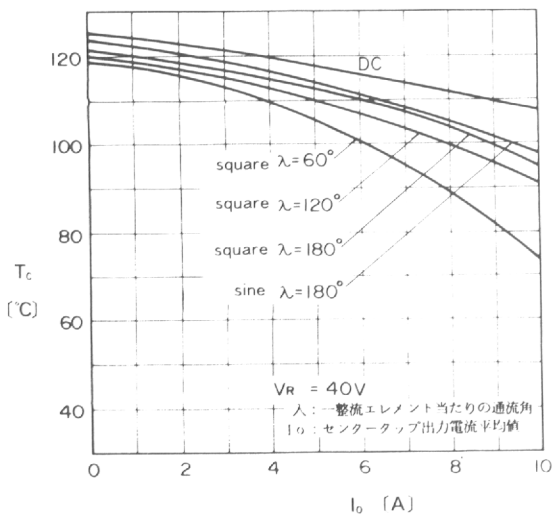
Reverse Characteristics



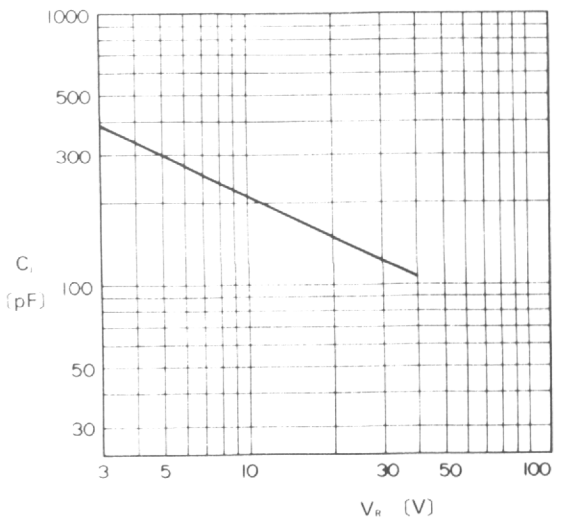
Forward Power Dissipation



Reverse Power Dissipation



Output Current-Case Temperature



Junction Capacitance Characteristics