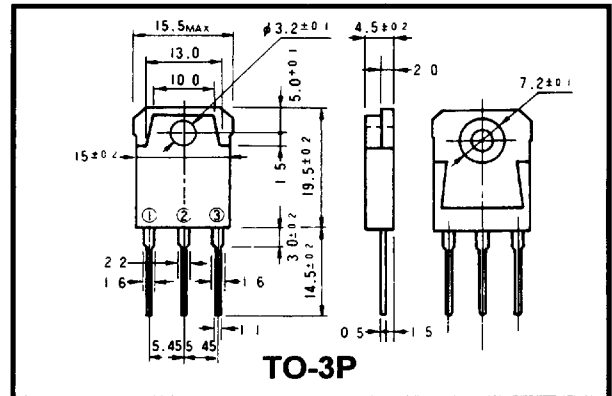


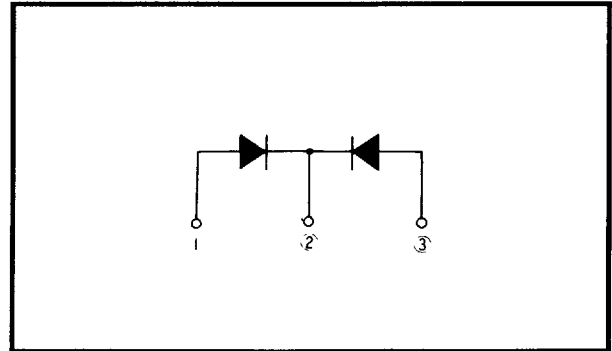
ESAD83-004K (30A)

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}	$t_w = 500ns$, duty = 1/40	48	V
Average Forward Current	I_o	$T_c = 90^\circ C$, duty 1/2, Square wave	30*	A
Surge Current	I_{FSM}	Sine Wave, 10ms	250	A
Operating Junction Temperature	T_J		-40 to +150	$^\circ C$
Storage Temperature	T_{stg}		-40 to +150	$^\circ C$

* Average forward current of centertap full wave connection

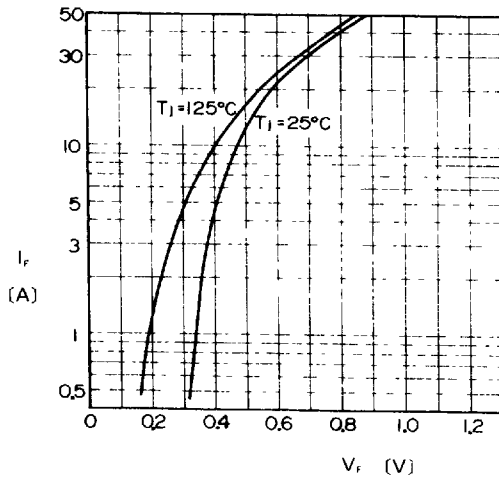
- Electrical Characteristics ($T_a = 25^\circ C$ Unless otherwise specified)

Items	Symbols	Conditions	Ratings	Units
Forward Voltage Drop	V_F	$I_F = 15A$	0.55	V
Reverse Current	I_R	$V_R = V_{RRM}$	30.0	mA
Thermal Resistance	$R_{th(j-c)}$	Junction to case	1.5	$^\circ C/W$

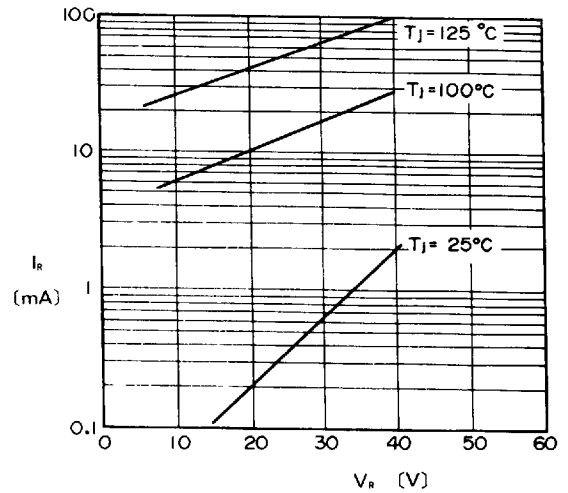
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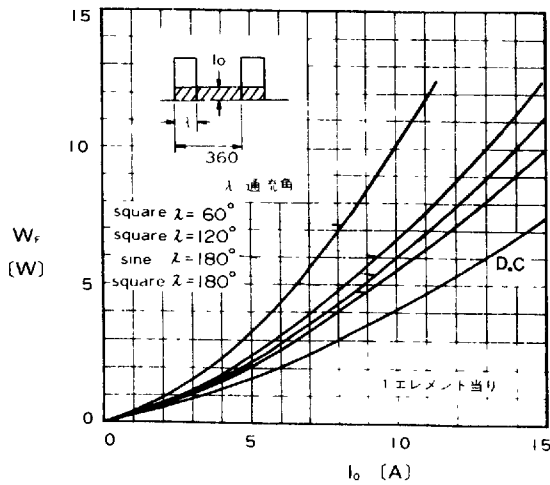
ESAD83-004K (30A)



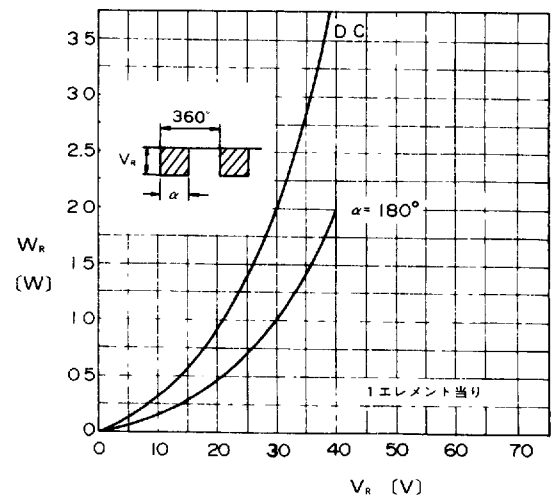
Forward Characteristics



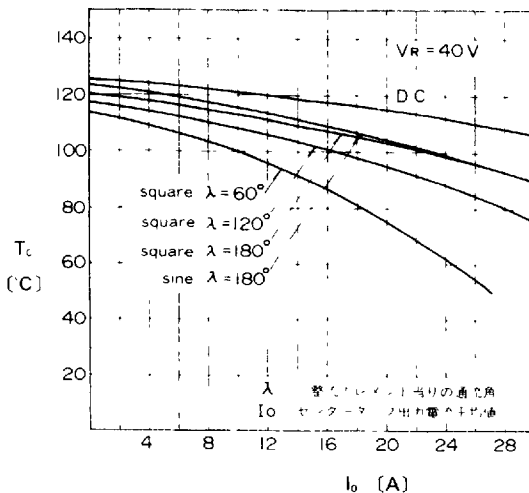
Reverse Characteristics



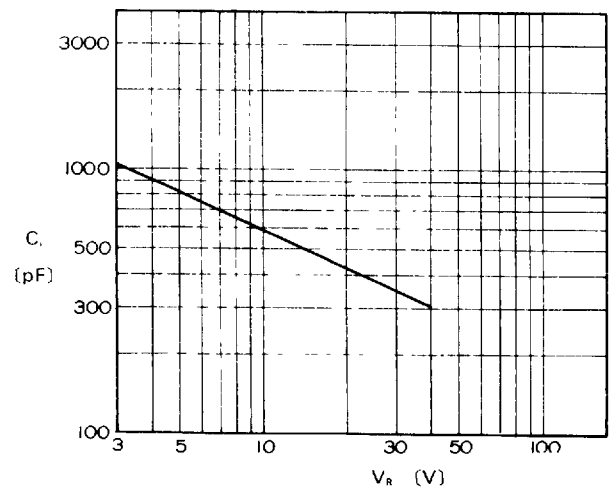
Forward Power Dissipation



Reverse Power Dissipation



Output Current-Case Temperature



Junction Capacitance Characteristics

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