ESAC85-009R

FUJI Diode

Schottky Barrier Diode

■ Maximum Rating and Characteristics

● **Maximum ratings (at Ta=25˚C unless otherwise specified.)**

Item	Symbols	Conditions	Ratings	Units
Repetitive peak surge reverse voltage	V_{RSM}	tw=500ns, duty=1/40	100	V
Repetitive peak reverse voltage	V_{RRM}	-	90	V
Average output current	Io	50Hz Square wave duty =1/2 Tc = 109˚C	10 *	A
Non-repetitive forward surge current**	I_{FSM}	Sine wave, 10ms 1shot	80	A
Operating junction temperature	Tj	-	150	˚C
Storage temperature	Tstg	-	-40 to +150	˚C

Note* Out put current of center tap full wave connection.
Note** Rating per element

● **Electrical characteristics (at Ta=25˚C unless otherwise specified.)**

Item	Symbols	Conditions	Maximum	Units
Forward voltage***	V_F	I_F = 4A	0.9	V
Reverse current***	I_R	$V_R = V_{RRM}$	5	mA
Thermal resistance	Rth(j-c)	Junction to case	3	˚C/W

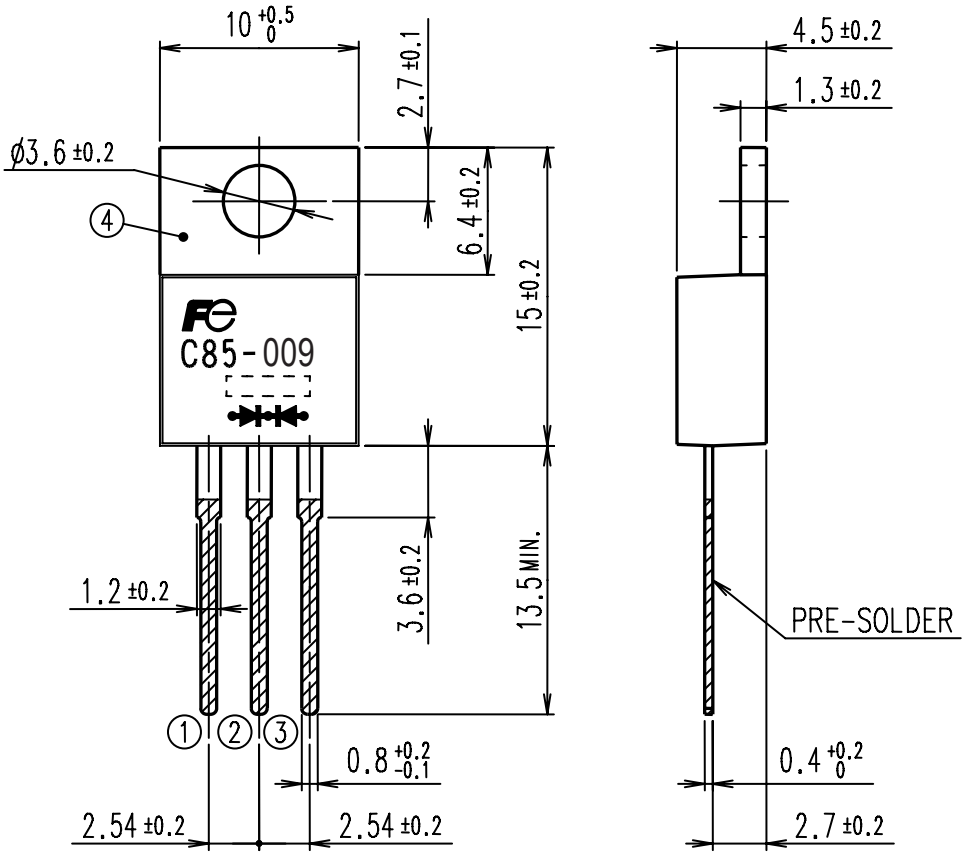
Note*** Rating per element

● **Mechanical characteristics**

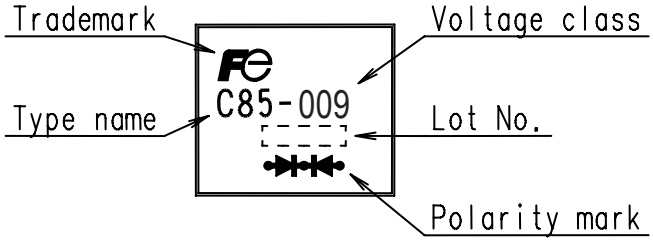
Item	Conditions	Maximum	Units
Mounting torque	Recommended torque	0.3 to 0.5	N•m
Approximate mass	-	2	g

■ Outline Drawings [mm]

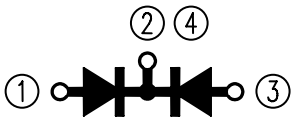
OUT VIEW



MARKING

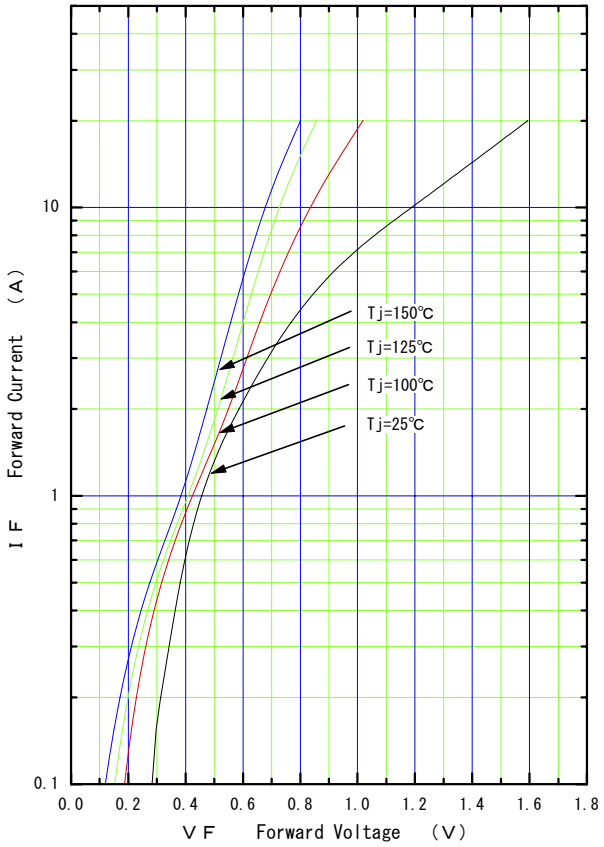


CONNECTION

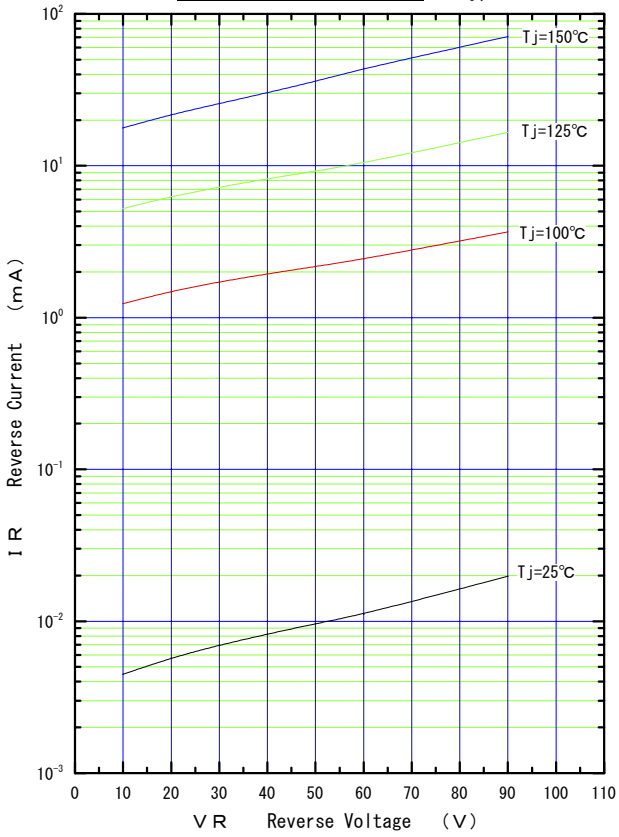


UNIT : mm

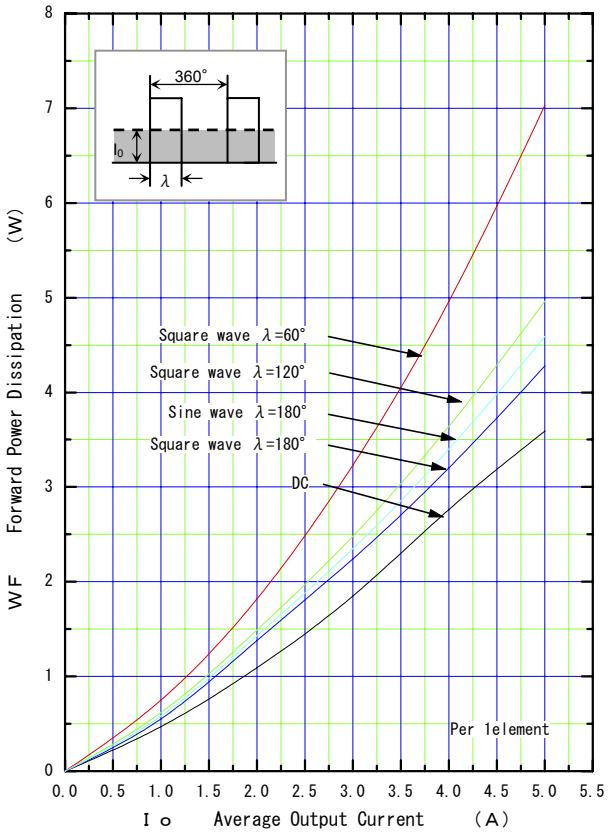
Forward Characteristic (typ.)



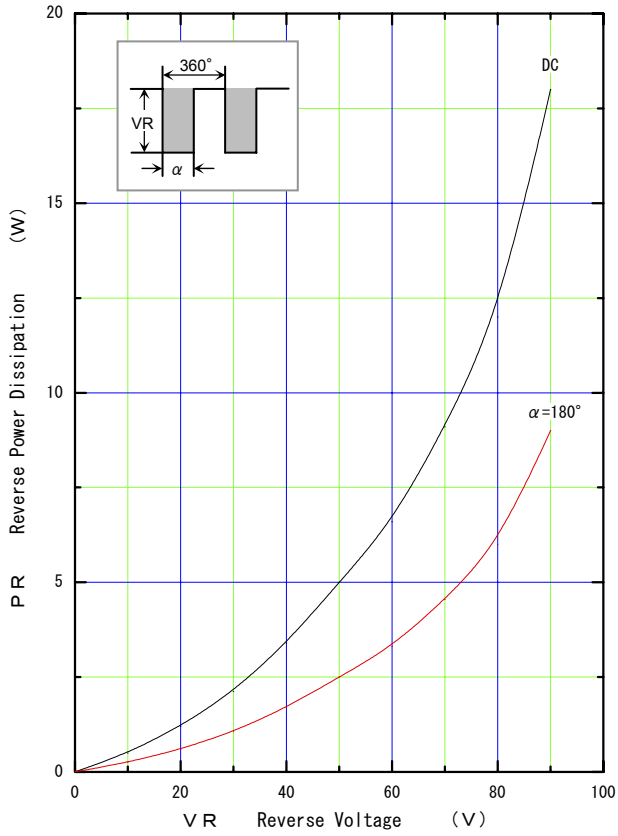
Reverse Characteristic (typ.)



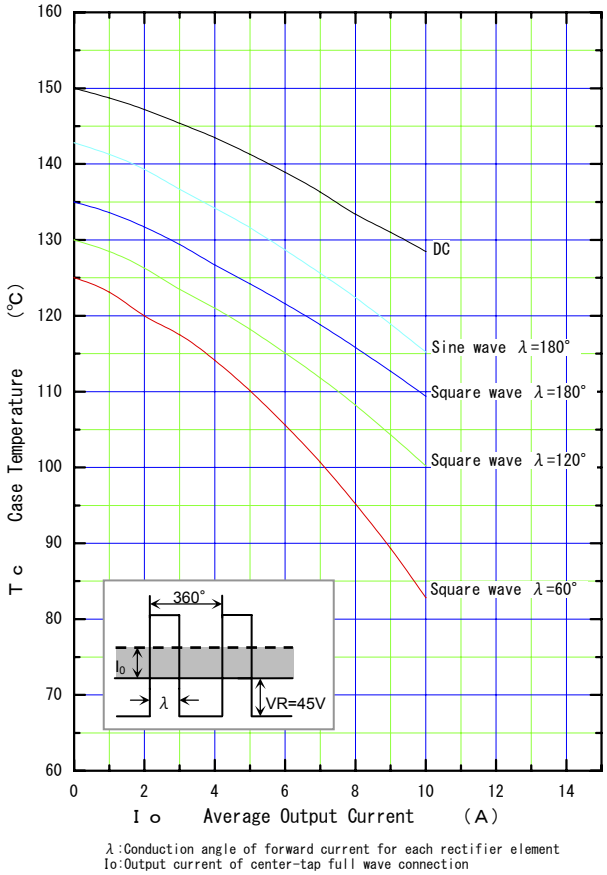
Forward Power Dissipation (max.)



Reverse Power Dissipation (max.)

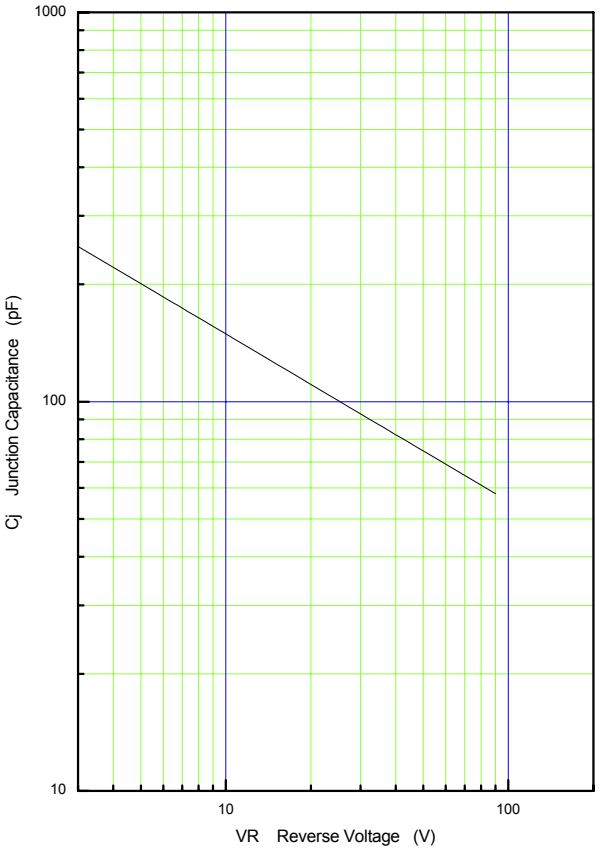


Current Derating (Io-Tc) (max.)

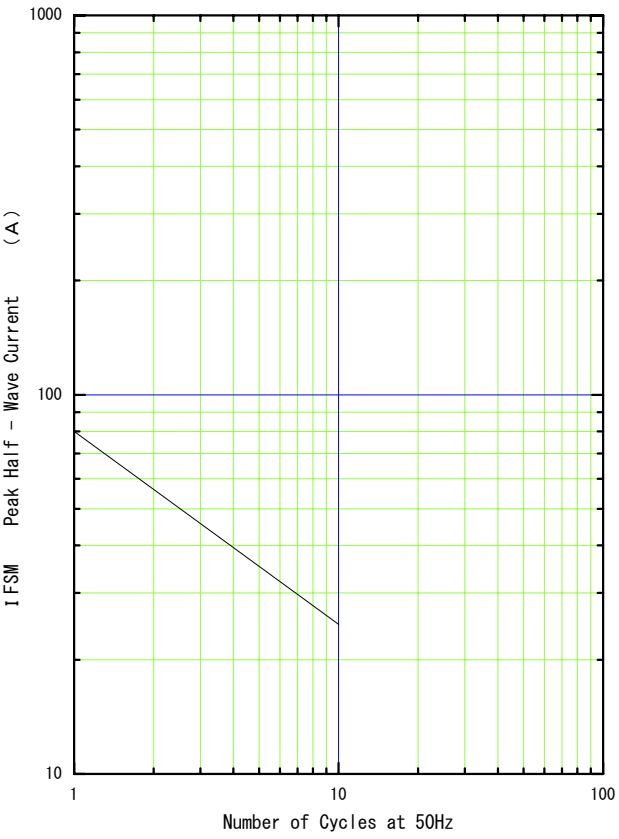


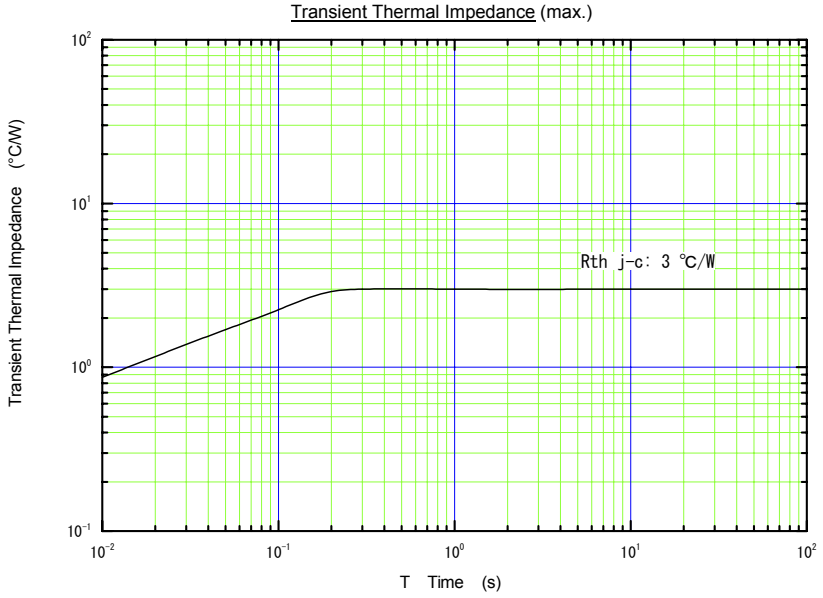
λ:Conduction angle of forward current for each rectifier element
Io:Output current of center-tap full wave connection

Junction Capacitance Characteristic (typ.)



Surge Capability (max.)




Transient Thermal Impedance (max.)
Transient Thermal Impedance (°C/W)
10^2
10^1
10^0
10^-1
Rth j-c: 3 ℃/W
10^-2
10^-1
10^0
10^1
10^2
T Time (s)

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