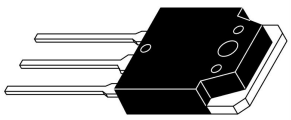
ESTF20D20SB

Ultrafast Recovery Diode

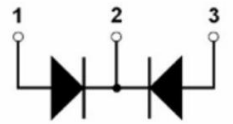
Features

- Low VF
- Super high speed switching.
- High reaibility by planer design.



Applications

- High speed power switching



Absolute Maximum Ratings

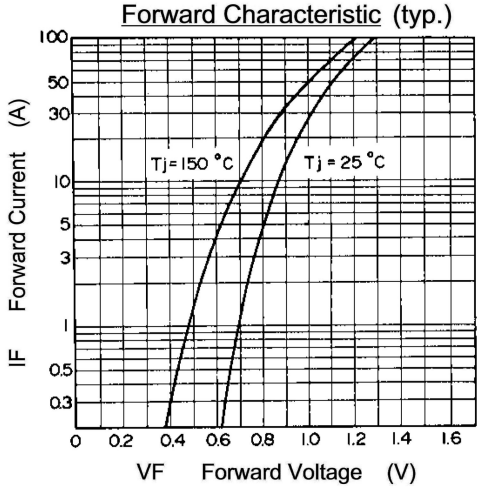
Parameter	Symbol	Test Conditions	Values	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		200	V
Average Output Current	I_O	duty=1/2, Tc=115°C Square wave	20*	A
Surge Current	I_{FSM}	Sine wave 10ms	100	A
Power Dissipation	P_D		156	W
Junction Temperature	T_J		-40~150	℃
Storage Temperature Range	T_{STG}		-40~150	
Thermal Resistance(3P)	$R_{\theta JC}$	Junction-to-Case	1.5	℃/W

Electrical Characteristics(T_C=25°C unless otherwise specified)

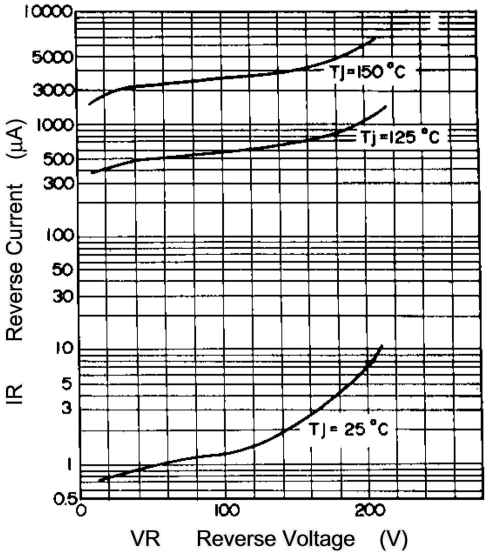
Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Reverse Current	I_{RRM}	$V_R=V_{RRM}$	-	-	200	μA
Forward Voltage Drop	V_{FM}	I_{FM}=10.0A	-	-	0.95	V
Reverse Recovery Time	t_{rr}	IF=0.1A, I_R=0.2A Irec=0.05A	-	-	40	ns

Electrical characteristics(Curves)

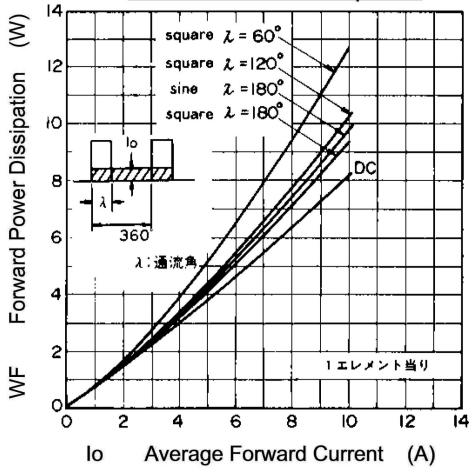
Forward Characteristic (typ.)



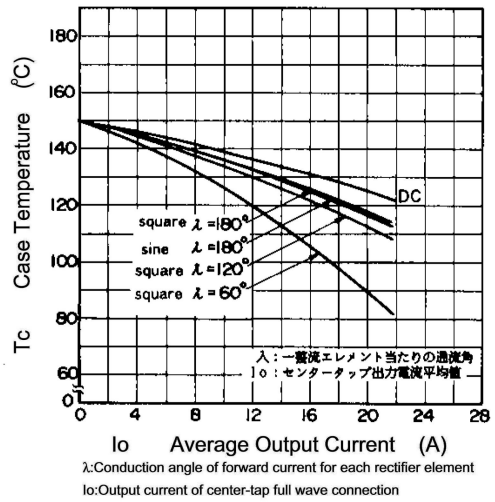
Reverse Characteristic (typ.)



Forward Power Dissipation

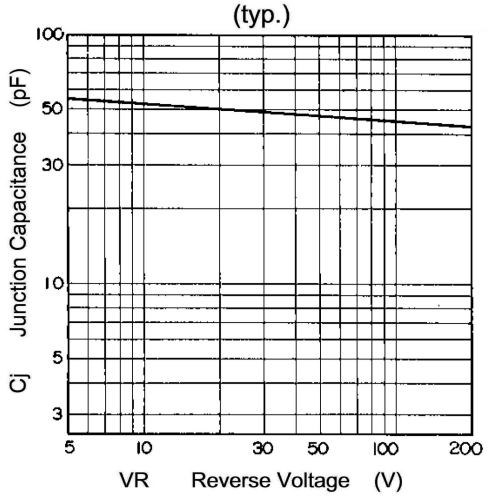


Current Derating (Io-Tc)

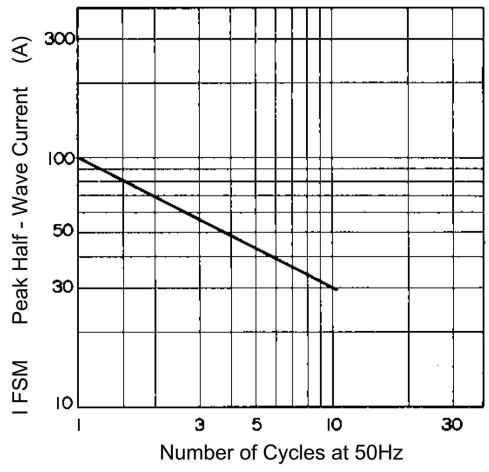


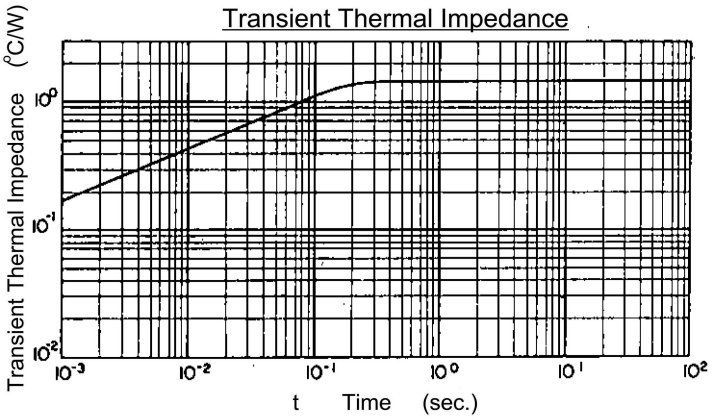
λ:Conduction angle of forward current for each rectifier element
Io:Output current of center-tap full wave connection

Junction Capacitance Characteristic (typ.)



Surge Capability





Package outline dimension