

ESTF60SS120ZS

Features

- Very low forward voltage drop
- 150°C max. operating junction temperature
- High reliability
- RoHS product



Applications

- Switching Power Supplies
- Snubber diode
- UPS
- Antiparalle Diode for high frequency Switching Devices



Absolute Maximum Ratings (T_C=25°C, Unless otherwise specified)

Symbol	Parameter	ratings	Unit
V _{RRM}	Repetitive peak reverse voltage @50μA	1200	V
V _{RSM}	Non-Repetitive peak reverse voltage	1300	V
I _{F(AV)}	Average forward current @T _C =25°C	120	A
	Average forward current @T _C =100°C	60	A
I _{FSM}	Peak one Cycle Surge Forward @t=10ms	100	A
P _D	Power Dissipation	367	W
I ² t	Maximum I ² t for fusing@10ms sine pulse ,no voltage applied	4230	A ² s
T _j	Junction Temperature	-55~+150	°C
T _{STG}	Storage temperature range	-55~+150	°C
	Mounting torque	3~6	N·m

Electrical Specifications (T_C=25°C, Unless otherwise specified)

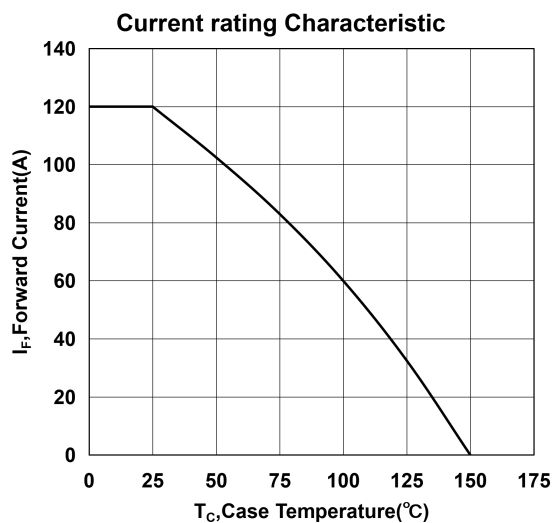
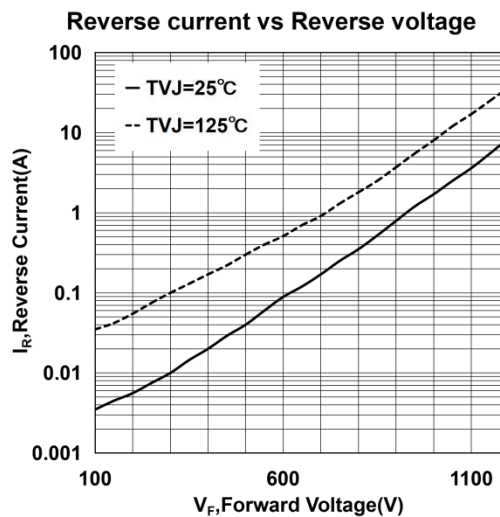
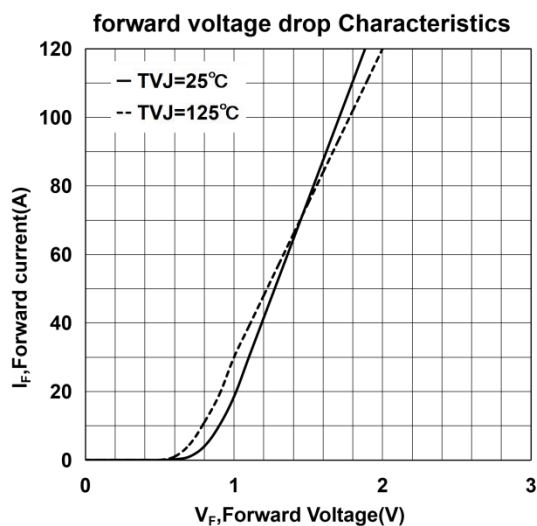
Symbol	Parameter	Test condition	Min	Typ	Max	Unit
I _R	Reverse leakage current	T _j =25°C	-	-	200	μA
		T _j =125°C			1000	μA
V _F	Forward voltage drop	I _F =30A, T _j =25°C	-	-	1.10	V
		I _F =30A, T _j =125°C	-	-	1.00	V
r _t	Forward slope resistance	T _j =150°C		3.96		mΩ
V _{F(TO)}	Threshold voltage			0.74		V

T_{rr}		$I_F=30A, V_R=30V,$ $di_F/dt=-200A/\mu s$		550		ns
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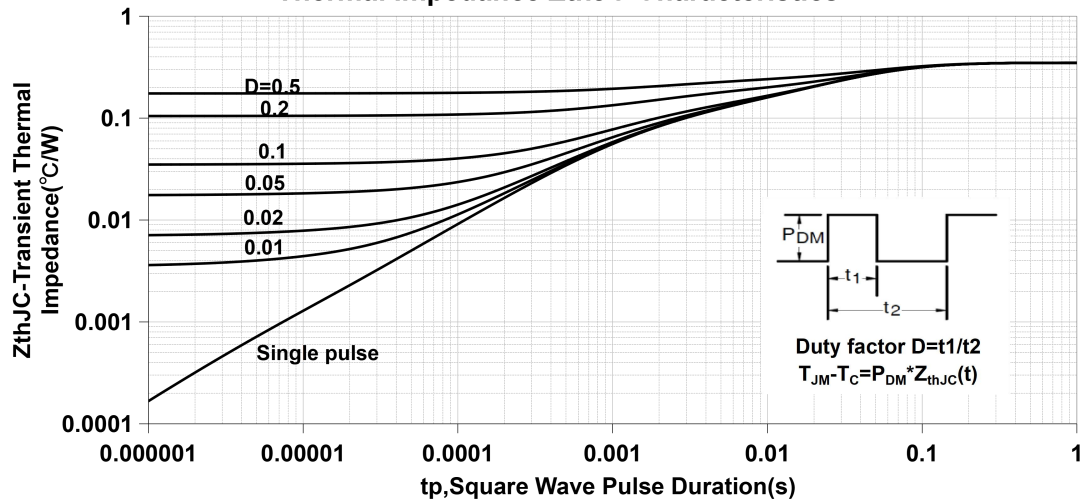
Thermal Characteristics

Symbol	Parameter	Test condition	Min	Typ	Max	Unit
$R_{th(j-c)}$	Thermal resistance from junction to case	DC poeration	-	-	0.35	$^{\circ}C/W$
$R_{th(j-a)}$	Thermal resistance from junction to heatsink		-	-	40	

Typical Performance Curves



Thermal Impedance ZthJC Characteristics



Package

