

ESTF8SS120C/S/D/P

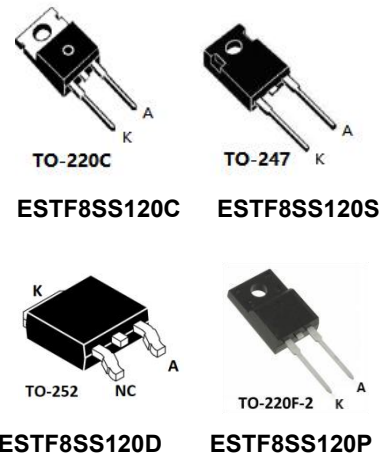
Fast Recovery Diode

Features

- Repetitive Reverse Voltage : $V_{RRM} = 1200V$
- Forward Voltage Drop : $V_F(max.) = 1.65V$
- Average Forward Current : $I_F(AV.) = 8A @ T_c = 100^{\circ}C$
- Fast Reverse Recovery Time : $t_{rr}(typ.) = 70ns$
- RoHS product

Applications

- Switching Power Supplies
- Power Switching Circuits
- General Purpose
- UPS



Absolute Maximum Ratings @ $T_c=25^{\circ}C$

Symbol	Parameter	ratings	Unit
V_{RRM}	Repetitive peak reverse voltage @50 μA	1200	V
V_{RWM}	Working Peak Reverse Voltage	1200	V
$I_{F(AV)}$	Average forward current @ $T_c=100^{\circ}C$	8	A
I_{FSM}	Peak one Cycle Surge Forward @20KHz	16	A
T_J	Junction Temperature	-50~+150	$^{\circ}C$
T_{STG}	Storage temperature range	-50~+150	$^{\circ}C$

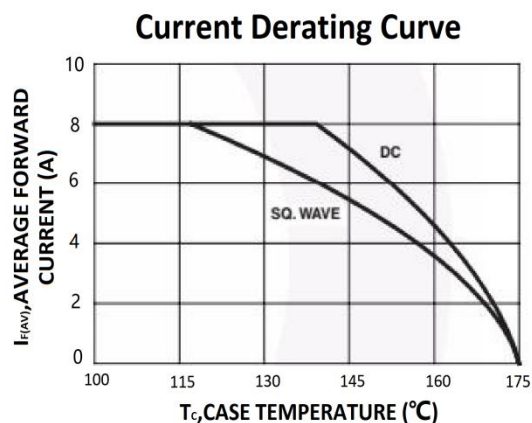
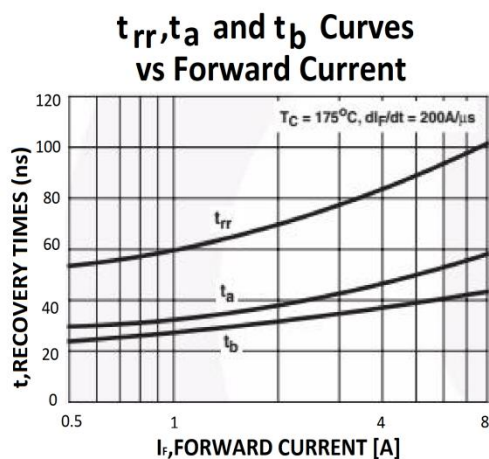
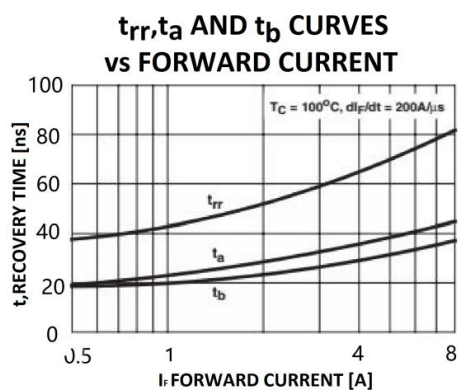
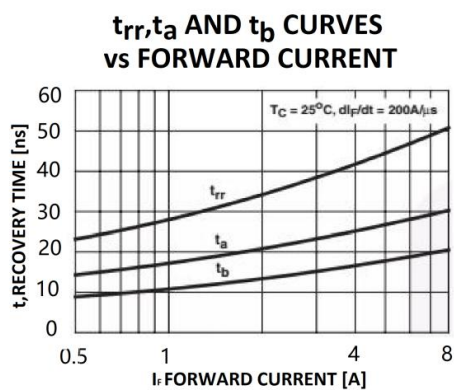
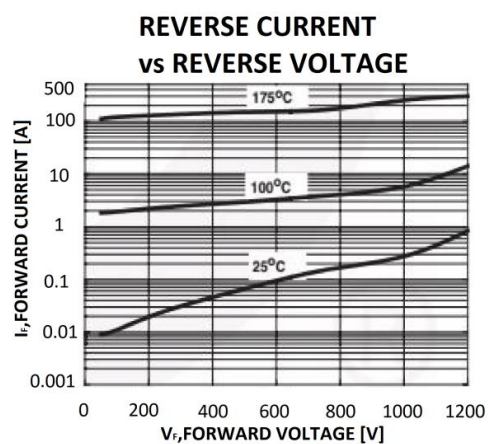
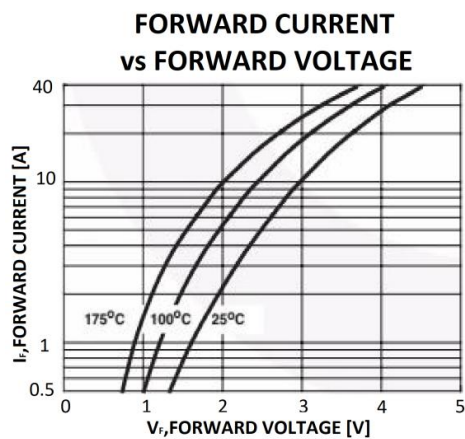
Electrical Specifications @ $T_c=25^{\circ}C$

Symbol	Parameter		Ratings			Unit
			Min	Typ	Max	
I _R	T _J =25℃	V _R =V _{RRM}			100	μA
	T _J =125℃				500	μA
V _F	T _J =25℃	I _F =8A			1.65	V
	T _J =125℃				1.2	V
T _{rr}	I _F =1A, V _R =30V, di _F /dt=-200A/μs			70		ns
R _{th(j-c)}	Thermal resistance from junction to case	TO-247-2L			0.9	℃/W
		TO-220C-2L			2	
		TO-252			2.3	
		TO-220F-2L			5.2	

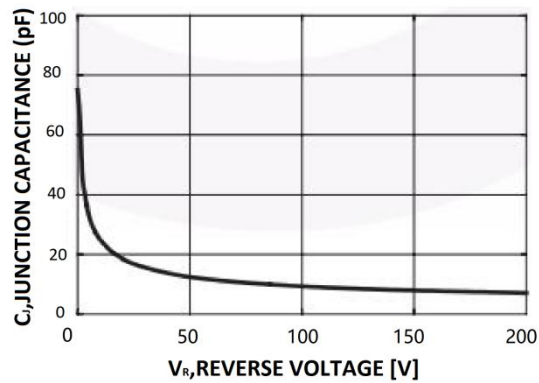
Order Information

Order codes	Silkscreen	Package	Packaging
ESTF8SS120C	F8S120C	TO-220C-2L	
ESTF8SS120S	F8S120S	TO-247-2L	
ESTF8SS120D	F8S120D	TO-252	
ESTF8SS120P	F8S120P	TO-220F-2L	

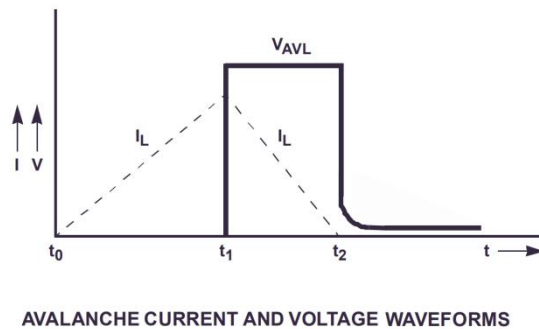
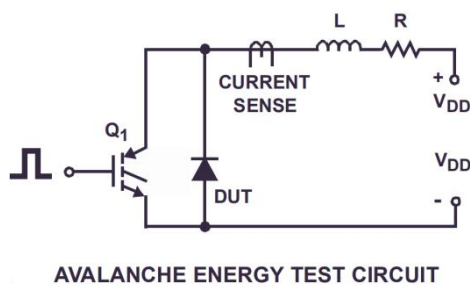
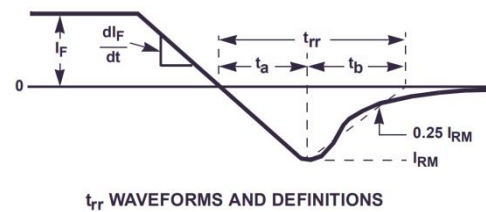
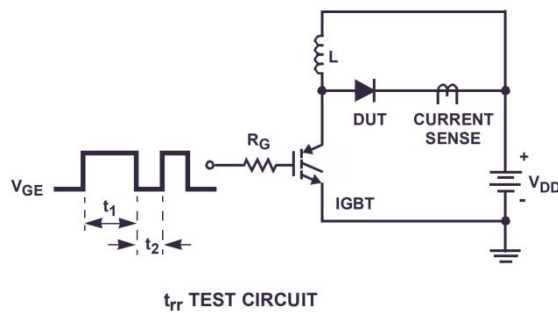
Typical Performance Curves



Junction Capacitance vs Reverse Voltage



Test Circuits and Waveforms



Package

