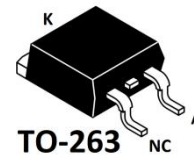
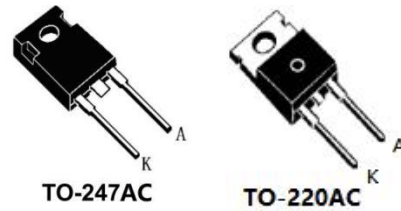


ESTF30SS60SC

Super Fast Recovery Diode

Features

- Ultra fast Recovery Time
- Low Recovery Loss
- Low Forward Voltage
- Low Leakage Current



Applications

- Switching Power Supplies
- Snubber diode
- Anti-parallel Diode for high frequency Switching Devices

Absolute Maximum Ratings @ T_c=25°C

Symbol	Parameter	ratings	Unit
V _{RRM}	Repetitive peak reverse voltage @50μA	600	V
V _{RWM}	Working Peak Reverse Voltage	600	V
I _{F(AV)}	Average forward current @T _c =110°C	30	A
I _{FSM}	Peak one Cycle Surge Forward @t=8.3ms	300	A
E _{AVL}	Avalanche Energy(per diode) (1A, 40mH)	20	mJ
T _j	Junction Temperature	-55~+175	°C
T _{STG}	Storage temperature range	-55~+175	°C

Electrical Specifications @ T_c=25°C

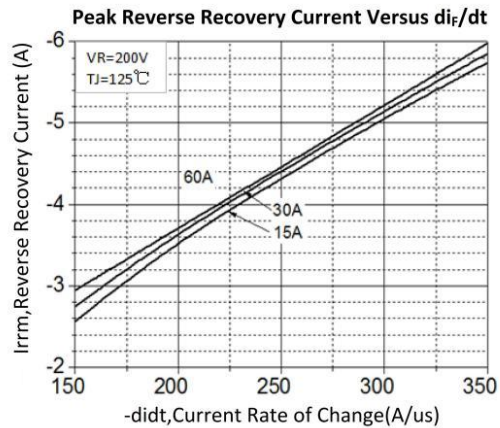
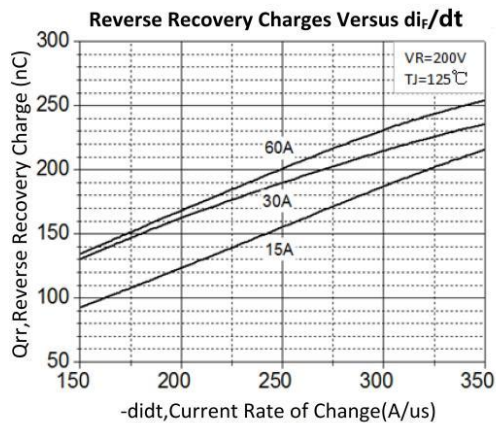
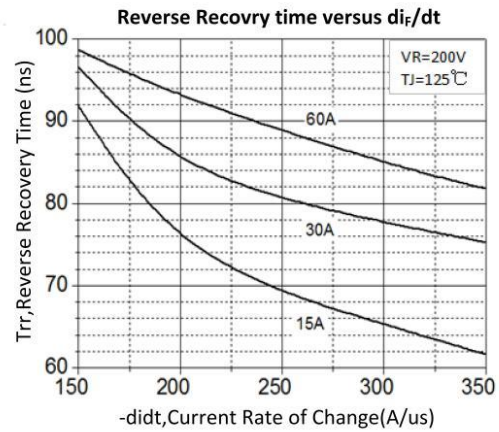
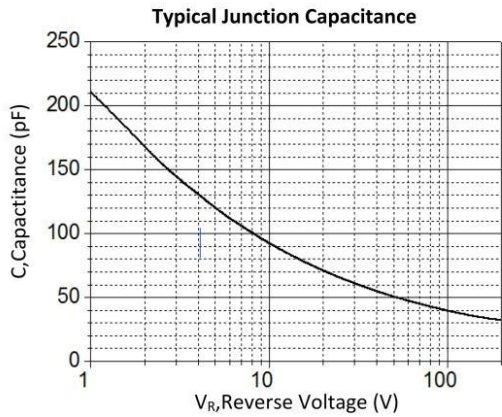
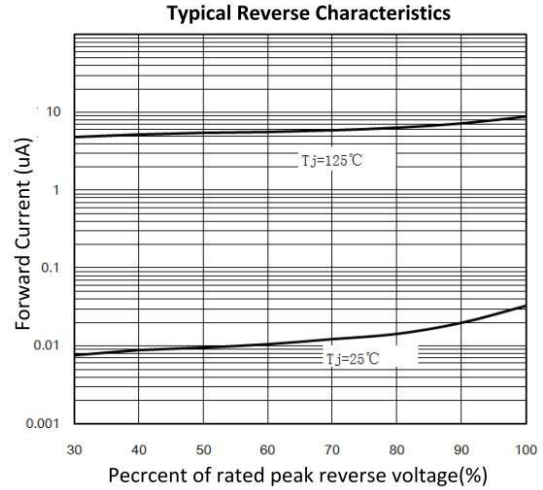
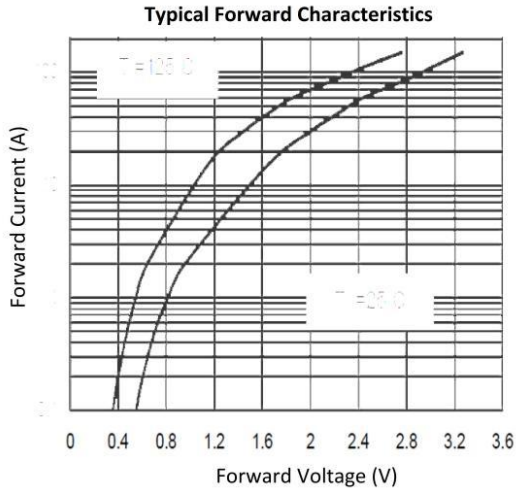
Symbol	Parameter		Ratings			Unit
			Min	Typ	Max	
I _R	T _j =25°C	V _R =V _{RRM}			10	μA
	T _j =125°C				300	μA
V _F	T _j =25°C	I _F =30A		2.0	2.5	V
	T _j =125°C				2.1	V
T _{rr}	I _F =0.5A, I _R =1A, I _{RR} =0.25A			28	40	ns
T _{rr}	I _F =1A, V _R =30V, di _F /dt=-200A/μs			20	25	ns
T _{rr}	I _F =30A, V _R =200V, di _F /dt=-200A/μs @T _c =25°C			30		ns
Q _{rr}				23		nC
I _R RM				1.5		A

T_{rr}	I_F=30A, V_R=200V, di_F/dt=-200A/μs @T_C=125°C		86		ns
Q_{rr}			160		nC
I_{RRM}			3.7		A
R_{th(j-c)}	Thermal resistance from junction to case	TO-220AC	1.2		°C/W
R_{th(j-c)}	Thermal resistance from junction to case	TO-247AC/ TO-263	0.45		°C/W

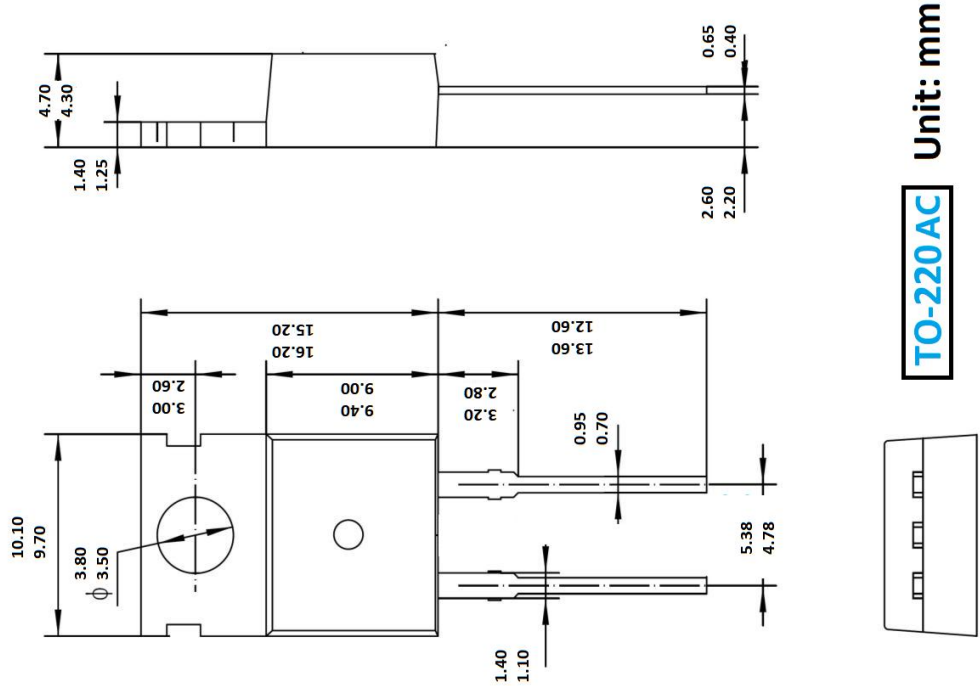
Order Message

Order codes	Package	Packaging
ESTF30SS60SC	TO-220AC	Tube
ESTF30SS60SS	TO-247AC	Tube
ESTF30SS60SE	TO-263	

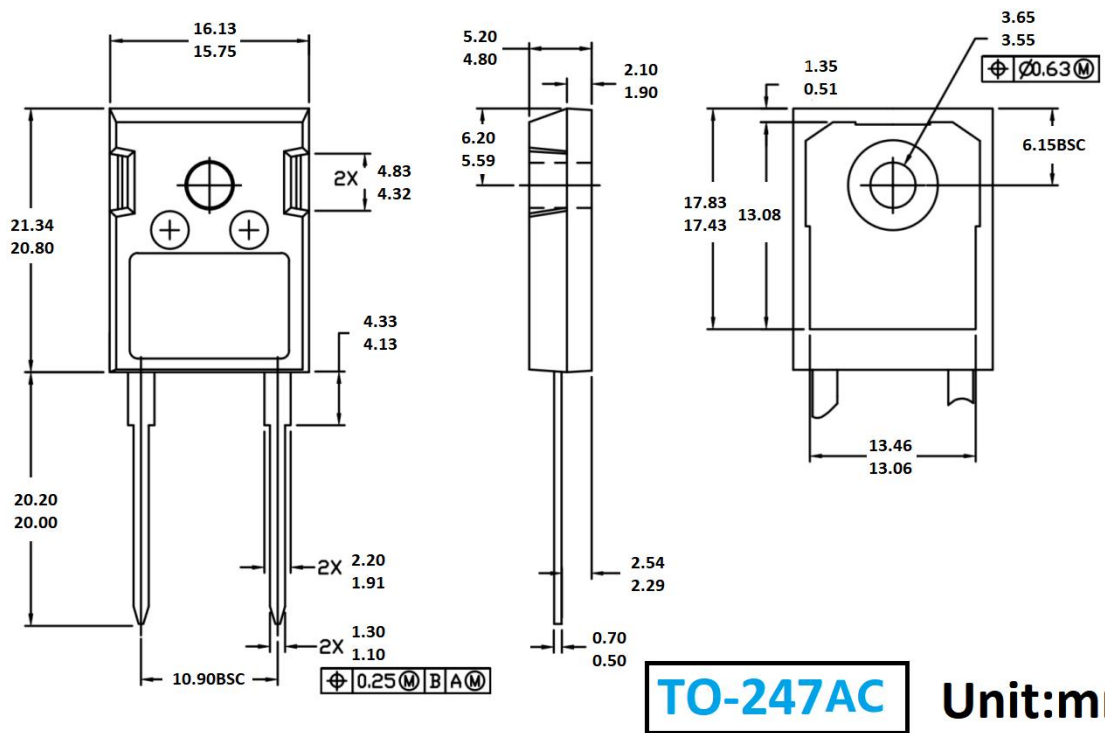
Typical Performance Curves



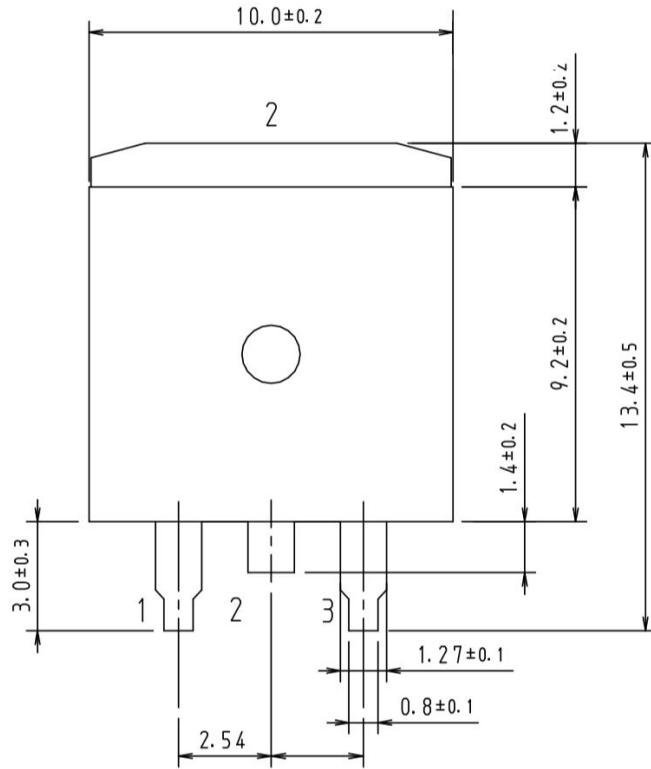
Package



TO-220AC Unit: mm



TO-247AC Unit: mm



TO-263

Unit:mm