

ESTF8SS60UC

Fast Recovery Diode

Features

- fast Recovery $t_{rr} = 70 \text{ ns}$ (@ $I_F = 8 \text{ A}$)
- Max Forward Voltage, $V_F = 1.35 \text{ V}$ (@ $T_C = 25^\circ\text{C}$)
- 600 V Reverse Voltage and High Reliability
- Avalanche Energy Rated
- RoHS Compliant



Applications

- Switching Power Supplies
- Snubber diode
- UPS



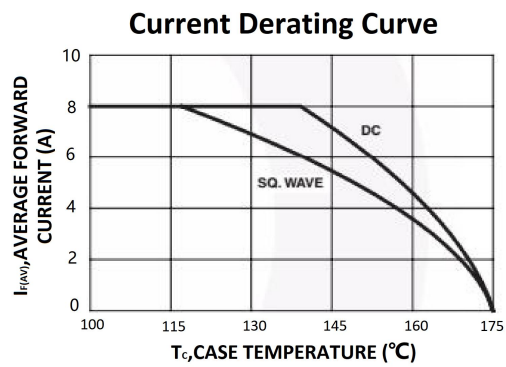
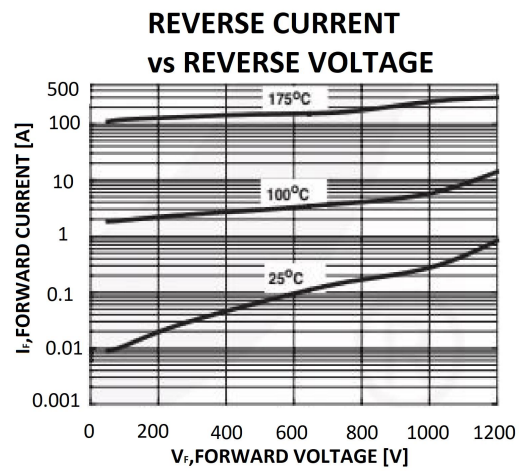
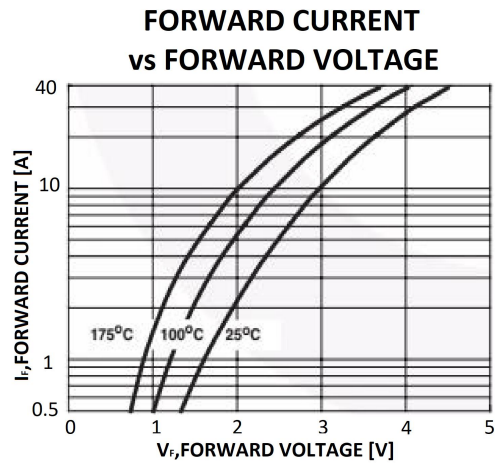
Absolute Maximum Ratings @ $T_C = 25^\circ\text{C}$

Symbol	Parameter	ratings	Unit
V_{RRM}	Repetitive peak reverse voltage @50 μA	600	V
V_{RWM}	Working Peak Reverse Voltage	600	V
$I_{F(AV)}$	Average forward current @ $T_C = 110^\circ\text{C}$	8	A
I_{FSM}	Peak one Cycle Surge Forward @ $t = 10 \text{ ms}$	80	A
T_j	Junction Temperature	-50~+150	$^\circ\text{C}$
T_{STG}	Storage temperature range	-50~+150	$^\circ\text{C}$

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

Symbol	Parameter		Ratings			Unit
			Min	Typ	Max	
I _R	T _j =25°C	V _R =V _{RRM}			50	μA
	T _j =125°C				500	μA
V _F	T _j =25°C	I _F =8A		1.35	1.65	V
	T _j =125°C			1.1	1.45	V
T _{rr}	I _F =1A, V _R =30V, di _F /dt=-200A/μs			27	45	ns
T _{rr}	I _F =8A, V _R =420V, di _F /dt=-500A/μs			70		ns
I _{rr}				11.92		A
R _{th(j-c)}	Thermal resistance from junction to case	TO-220AC		1.5		°C/W

Typical Performance Curves



Package

