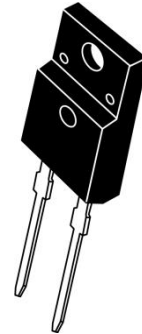


ESTF10D60US

Fast Recovery Diode

Features

- Repetitive Reverse Voltage : $V_{RRM} = 600V$
- Forward Voltage Drop : $V_F(\text{typ.}) = 1.35V$
- Average Forward Current : $I_F(\text{AV.}) = 10A$ @ $T_c = 100^\circ C$
- Fast Reverse Recovery Time : $t_{rr}(\text{typ.}) = 45ns$
- RoHS product



Applications

- Switching Power Supplies
- Power Switching Circuits
- Welding Machine
- UPS



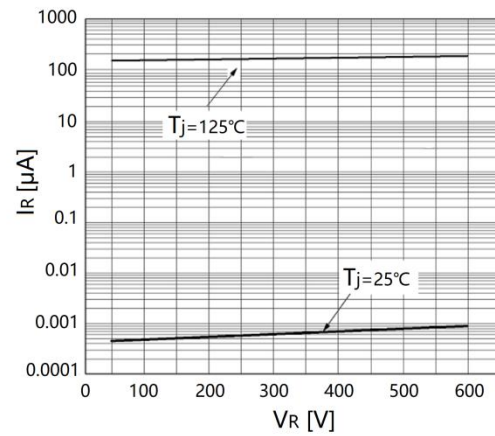
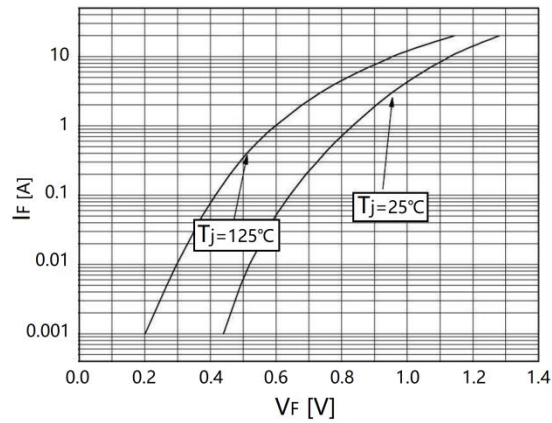
Absolute Maximum Ratings @ $T_c=25^\circ C$

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 @ $T_c=100^\circ C$	10	A
I_{FSM}	Peak one Cycle Surge Forward @ $t=10ms$	100	A
P_D	Power Dissipation	75	W
T_j	Junction Temperature	-50~+150	$^\circ C$
T_{STG}	Storage temperature range	-50~+151	$^\circ C$

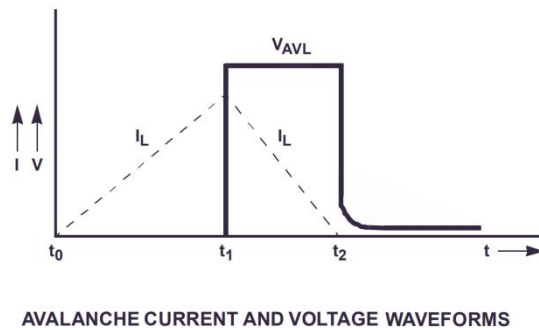
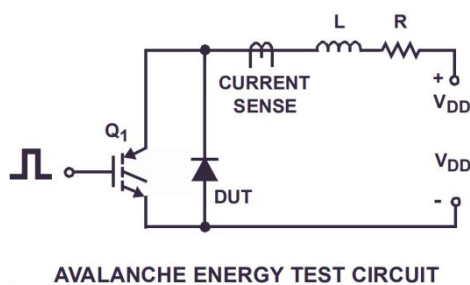
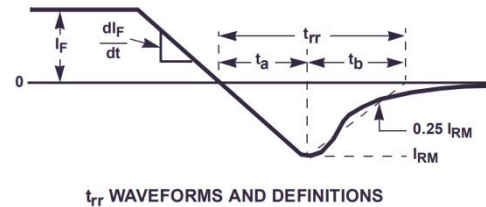
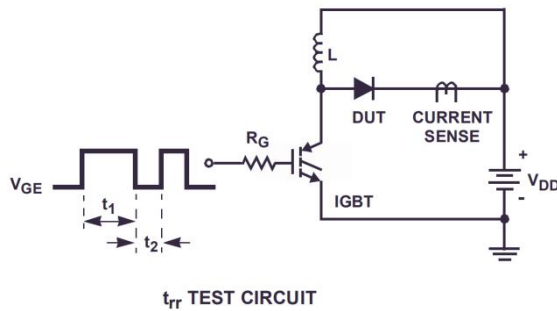
Electrical Specifications @ $T_c=25^\circ C$

Symbol	Parameter		Ratings			Unit
			Min	Typ	Max	
I _R	T _j =25℃	V _R =V _{RRM}			50	μA
	T _j =125℃				200	μA
V _F	T _j =25℃	I _F =10A		1.35	1.8	V
	T _j =125℃			1.15	1.6	V
T _{rr}	I _F =1A, V _R =300V, di _F /dt=-200A/μs			35	45	ns
	I _F =10A, V _R =300V, di _F /dt=-200A/μs			45	85	ns
R _{th(j-c)}	Thermal resistance from junction to case	TO-220F			3.5	℃/W

Typical Performance Curves



Test Circuits and Waveform



Package

