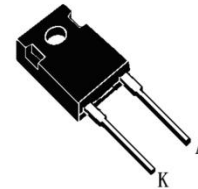


# ESTF60SS60US

## Fast Recovery Diode

### Features

- Repetitive Reverse Voltage :  $V_{RRM} = 600V$
- Forward Voltage Drop :  $V_F(\text{typ.}) = 1.5V$
- Average Forward Current :  $I_{F(AV)} = 60A$
- Fast Reverse Recovery Time :  $t_{rr}(\text{typ.}) = 45ns$
- RoHS product

**TO-2472L**


### Applications

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



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

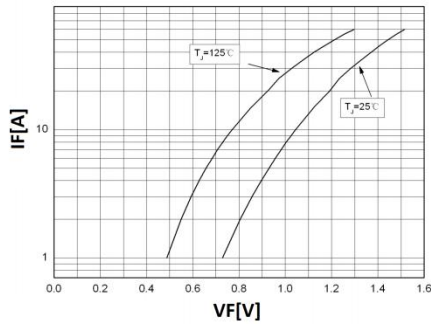
Symbol	Parameter	ratings	Unit
$V_{RRM}$	Repetitive peak reverse voltage @ $50\mu A$	600	V
$V_{RWM}$	Working Peak Reverse Voltage	600	V
$I_{F(AV)}$	Average forward current @ $T_c=100^\circ C$	60	A
$I_{FSM}$	Peak one Cycle Surge Forward @ $t=10ms$	480	A
$T_j$	Junction Temperature	-55~+175	$^\circ C$
$T_{STG}$	Storage temperature range	-55~+175	$^\circ C$

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

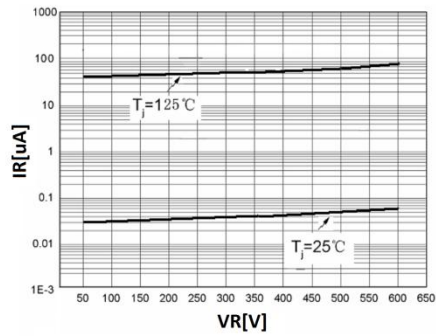
Symbol	Parameter		Ratings			Unit
			Min	Typ	Max	
$I_R$	$T_j=25^\circ C$	$V_R=V_{RRM}$			50	$\mu A$
	$T_j=125^\circ C$				800	$\mu A$
$V_F$	$T_j=25^\circ C$	$I_F=60A$		1.5	2.4	V
	$T_j=125^\circ C$				2.1	V
$T_{rr}$	$I_F=1A, V_R=30V, diF/dt=-200A/\mu s$				45	ns
$R_{th(j-c)}$	Thermal resistance from junction to case	TO-247-2L			0.34	$^\circ C/W$

### Typical Performance Curves

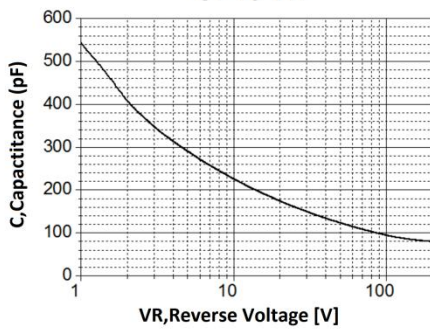
**IF vs VF**



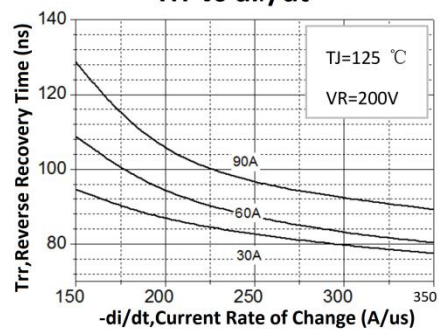
**IR vs VR**



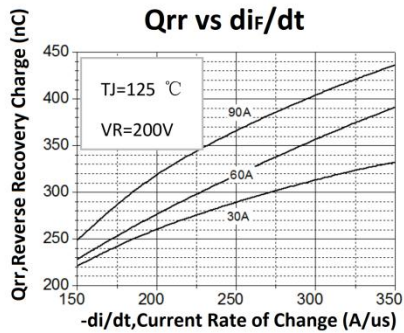
**CT vs VR**



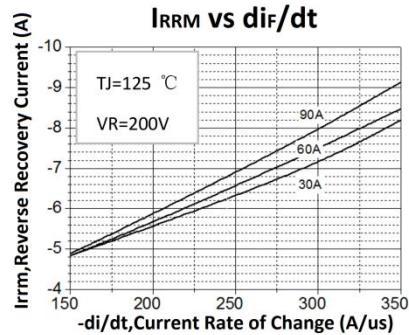
**Trr vs di/dt**



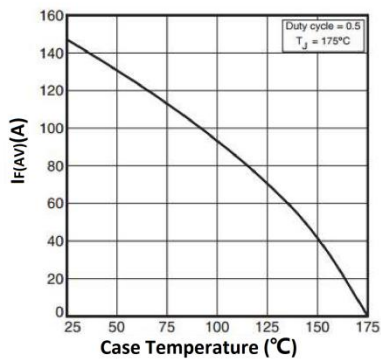
**Qrr vs di/dt**



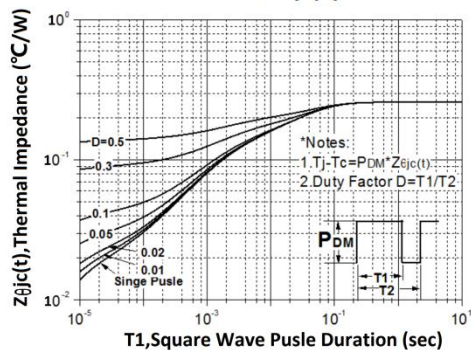
**Irrm vs di/dt**



**IF vs TC**



**Zθjc vs tp(s)**



### Package

