

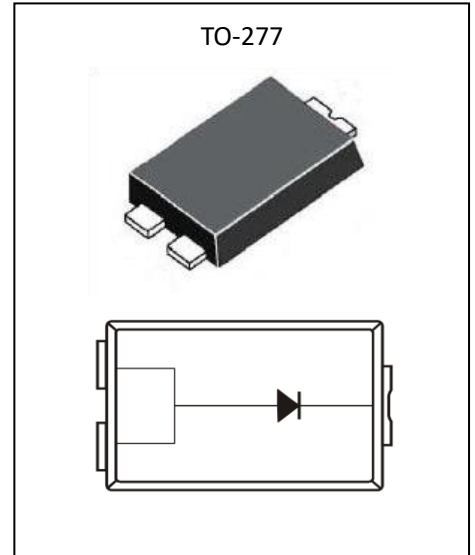
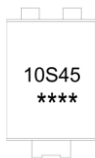


GP10S45

Feature

- Ultra-Low Forward Voltage
- Low Power Loss, High Efficiency
- High Current Capability
- High Surge Capability
- High Junction Temperature
- Low Reverse Current

MARKING:



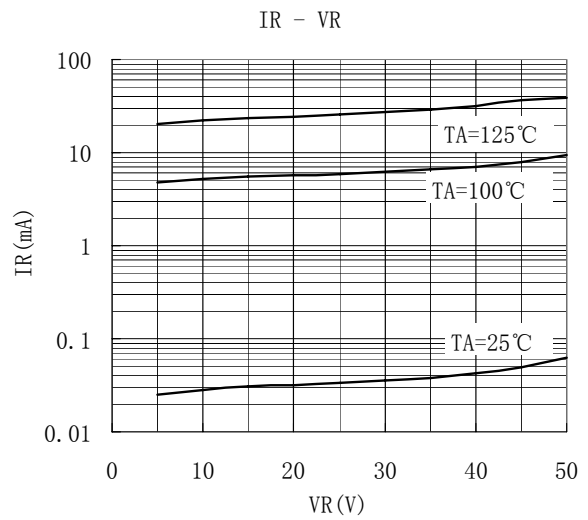
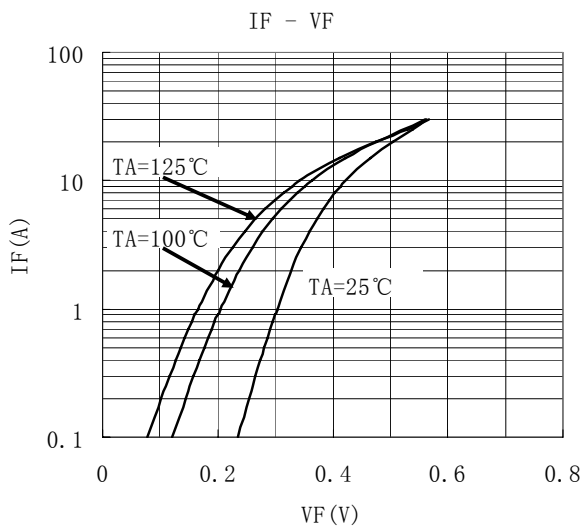
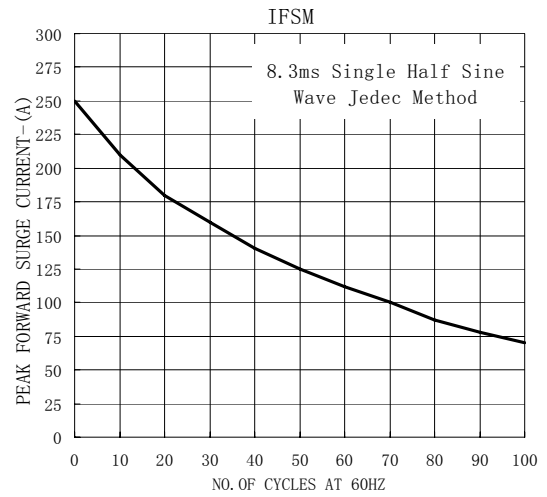
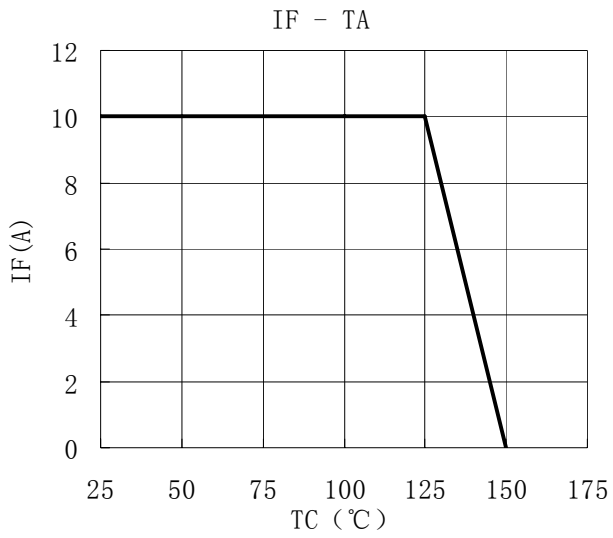
ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak repetitive reverse voltage	V_{RRM}	45	V
Working peak reverse voltage	V_{RWM}		
DC blocking voltage	V_R		
RMS reverse voltage	$V_{R(RMS)}$	31.5	V
Average rectified output current@ $T_c=125^{\circ}\text{C}$	I_o	10	A
Non-Repetitive peak forward surge current 8.3ms half sine wave	IFSM	250	A
Thermal resistance from junction to ambient	$R_{\theta JA}$	73	$^{\circ}\text{C}/\text{W}$
Junction temperature	T_j	150	$^{\circ}\text{C}$
Storage temperature	T_{stg}	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=0.5\text{mA}$	45			V
Reverse current	I_R	$V_R=45\text{V}, T_J=25^{\circ}\text{C}$		0.06	0.12	mA
		$V_R=45\text{V}, T_J=100^{\circ}\text{C}$			12	
		$V_R=45\text{V}, T_J=125^{\circ}\text{C}$			50	
Forward voltage	V_F	$I_F=2\text{A}, T_J=25^{\circ}\text{C}$		0.33	0.38	V
		$I_F=2\text{A}, T_J=125^{\circ}\text{C}$		0.20		
		$I_F=10\text{A}, T_J=25^{\circ}\text{C}$		0.42	0.46	
		$I_F=10\text{A}, T_J=125^{\circ}\text{C}$		0.35		

Typical Characteristics



TO-277 Package Outline Dimensions

