

Pb Free Plating Product

S10U45S

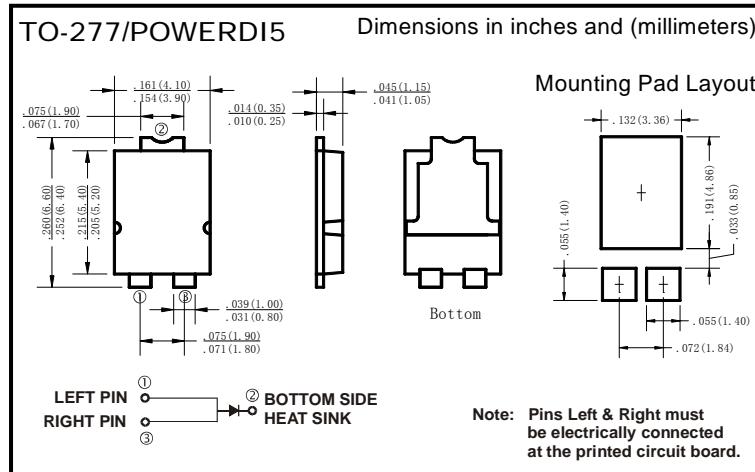
10 Ampere Lower VF Miniature Surface Mount Schottky Barrier Rectifier

**■ Features**

- High surge Forward current capability
- Low Power loss, High efficiency
- IF (AV) 10A
- VRRM 45V

■ Applications

- Switching Power Supply Industry
- Photovoltaic Solar cell Protection Schottky Rectifier

**■ Limiting Values (Absolute Maximum Rating)**

Item	Symbol	Unit	Conditions	S10U45S
Repetitive Peak Reverse Voltage	VRRM	V		45
Average Rectified Output Current	Io	A	60HZ sine wave, R- load, Ta=25°C	10
Surge(Non-repetitive)Forward Current	IFSM	A	60HZ sine wave, 1 cycle, Ta=25°C	275
Current Squared Time	I ² t	A ² s	1ms≤t<8.3ms T _j =25°C	313
Storage Temperature	Tstg	°C		-55 ~ +150
Junction Temperature	T _j	°C	IN DC Forward Mode-Forward Operations without reverse bias, t≤1 h (Fig. 1)① ,	-55~+200

■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

Item	Symbol	Unit	Test Condition		Max
Peak Forward Voltage	VFM	V	IFM =10.0A		0.47
Peak Reverse Current	IRRM1	mA	V _{RM} =V _{RMM}	T _j =25°C	0.3
	IRRM2			T _j =100°C	15
Thermal Resistance(Typical)	R _{θJ-L}	°C/W	Between Junction and Lead		10

Rating and Characteristic Curves

FIG1: IF (AV) --TL Derating

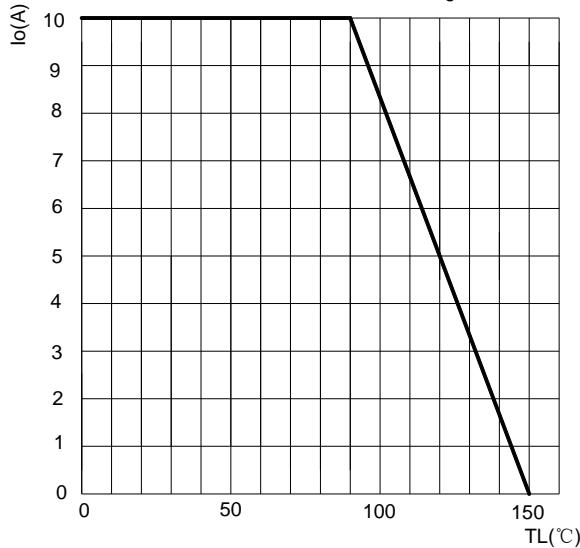


FIG2: Surge Forward Current Capability

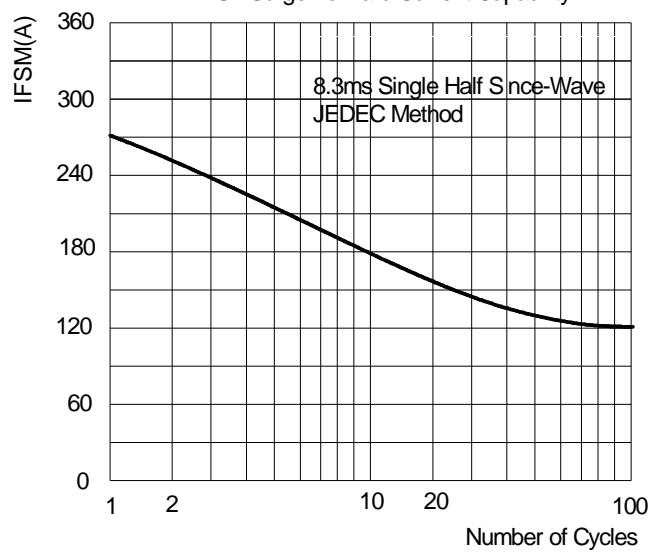


FIG3: Instantaneous Forward Voltage

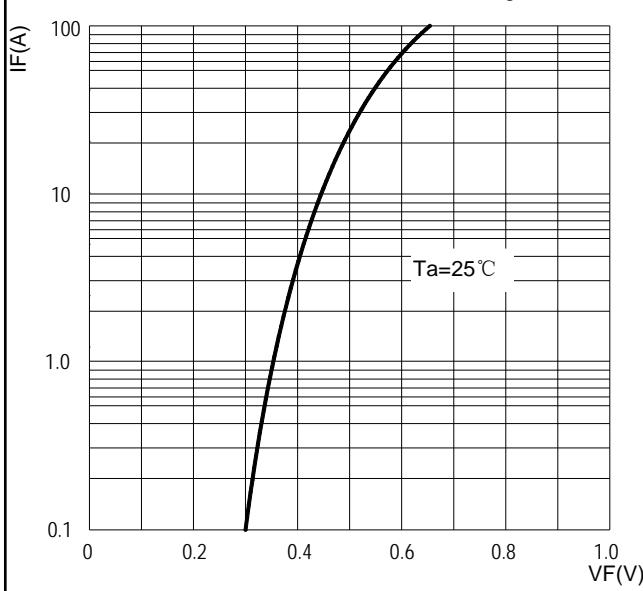


FIG4: Typical Reverse Characteristics

