

# 10S45P

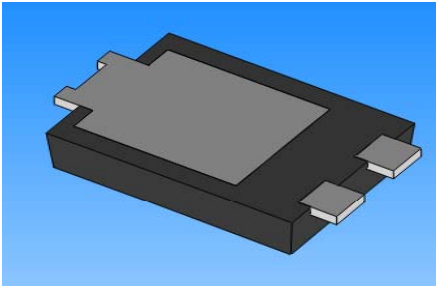


## SCHOTTKY BARRIER RECTIFIER VOLTAGE RANGE 45Volts CURRENT 10.0 Ampere

### FEATURES

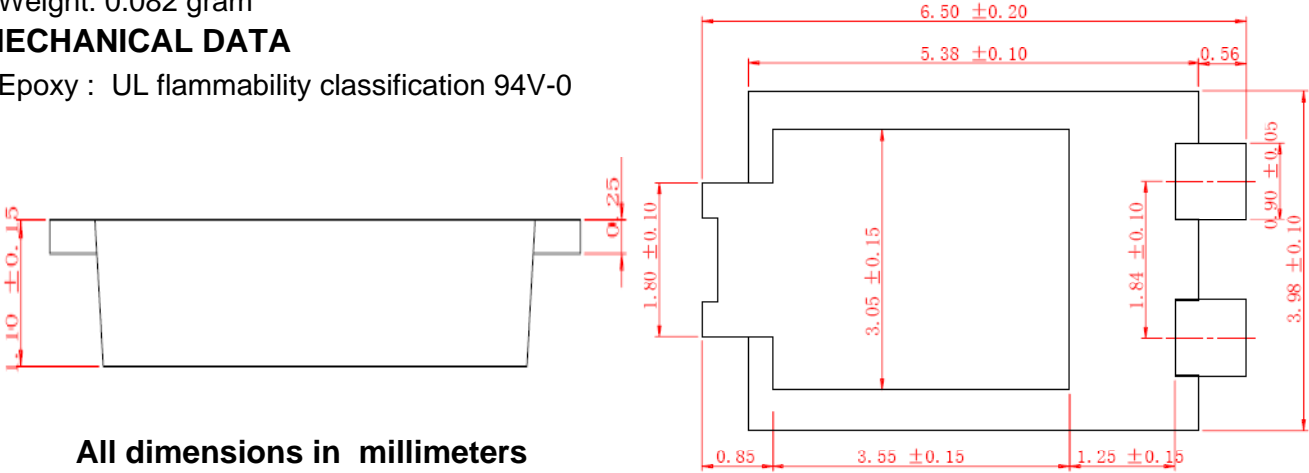
- \* Low switching noise
- \* Low forward voltage drop
- \* High surge capability
- \* High current capability
- \* Mounting position: Any
- \* Weight: 0.082 gram

### TO-277



### MECHANICAL DATA

- \* Epoxy : UL flammability classification 94V-0



All dimensions in millimeters

### MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	10S45P	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	<b>45</b>	Volts
Maximum RMS Voltage	$V_{RMS}$	<b>31.5</b>	Volts
Maximum DC Blocking Voltage	$V_{DC}$	<b>45</b>	Volts
Maximum Average Forward Rectified Current at Ambient Temperature	$I_o$	<b>10</b>	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	<b>180</b>	Amps
Operating Temperature Range	$T_J$	<b>150</b>	°C
Storage Temperature Range	$T_{STG}$	<b>-55 to + 150</b>	°C

### ELECTRICAL CHARACTERISTICS(@TA=25 °C unless otherwise noted)

		VF	TYP.	MAX.	
Forward Voltage Drop (note1)		VF			Volts
$I_F=10A, T_A=25^{\circ}C$			<b>0.47</b>	<b>0.5</b>	
$I_F=10A, T_A=125^{\circ}C$			<b>0.45</b>	-	
Maximum Reverse Current at Rated DC Blocking Voltage	@ $T_A=25^{\circ}C$	IR	<b>300</b>		uA
	@ $T_A=125^{\circ}C$		<b>100</b>		mA

Notes:(1) Pulse test :300 us pulse width,1% duty cycle

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

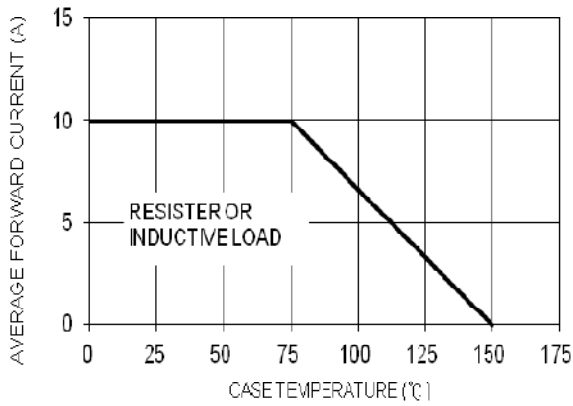


FIG.2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

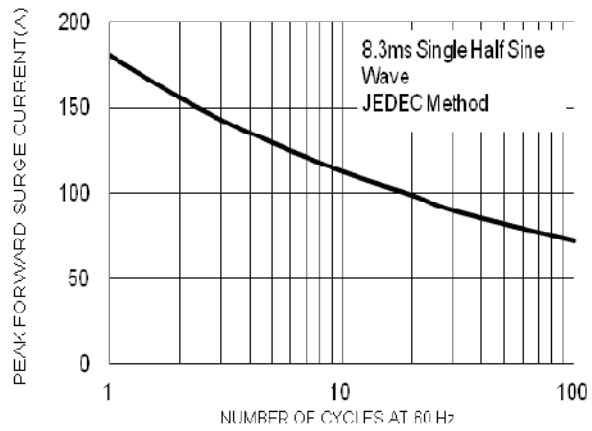


FIG.3 TYPICAL FORWARD CHARACTERISTICS PER LEG

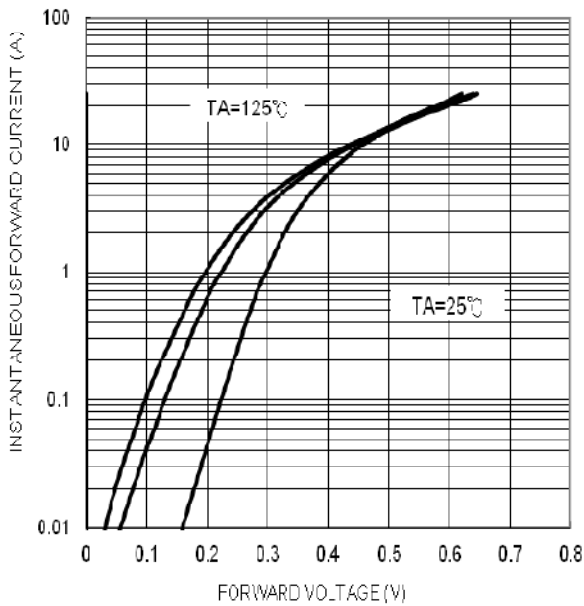


FIG.4 TYPICAL REVERSE CHARACTERISTICS PER LEG

