

## S3P6R

### 3.0AMPS. PLANAR MOS SCHOTTKY BARRIER RECTIFIERS

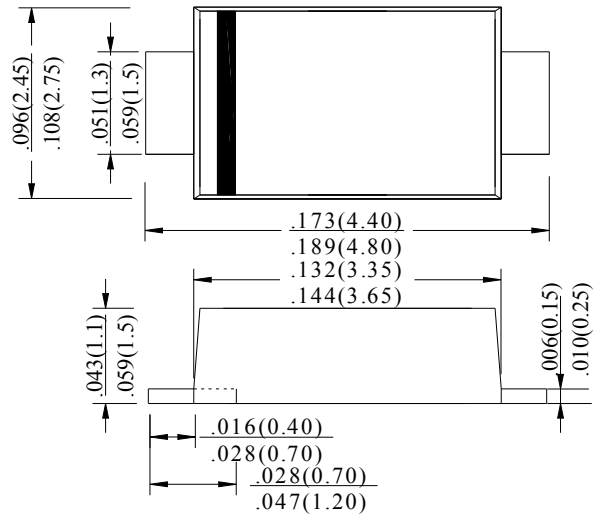
#### FEATURE

- . For surface mounted application
- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge current capability
- . High temperature soldering guaranteed  
260°C/10 seconds at terminals.

#### MECHANICAL DATA

- . Terminal: Solder plated
- . Case: Molded with UL-94 Class V-0 recognized  
Flame Retardant Epoxy (free halogen)
- . Polarity: color band denotes cathode
- . Packaging: 12mm tape per EIA STD RS-481

#### SMF



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	SYM BOL	S3P6R	units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	60	V
Maximum RMS Voltage	$V_{RMS}$	42	V
Maximum DC blocking Voltage	$V_{DC}$	60	V
Maximum Average Forward Rectified Current at $T_L = 90^\circ\text{C}$	$I_{F(AV)}$	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	70	A
Maximum Forward Voltage @ $T_A = 25^\circ\text{C}$	at 3.0A DC	$V_{F Max}$	0.52
	at 1.0A DC	$V_{F Type}$	0.37
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at rated DC blocking voltage @ $T_A = 100^\circ\text{C}$	$I_R$		0.2
			10
Typical Junction Capacitance (Note1)	$C_J$	72	pF
Typical Thermal Resistance (Note2)	$R_{(JL)}$	45	°C/W
	$R_{(JC)}$	28	
Storage Temperature	$T_{STG}$	-55 to +150	°C
Operating Junction Temperature	$T_J$	-55 to +150	°C

#### Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Measured on P.C.Board with 0.2×0.2"(5.0×5.0mm)Copper Pad Areas.

**RATING AND CHARACTERISTIC CURVES (S3P6R)**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

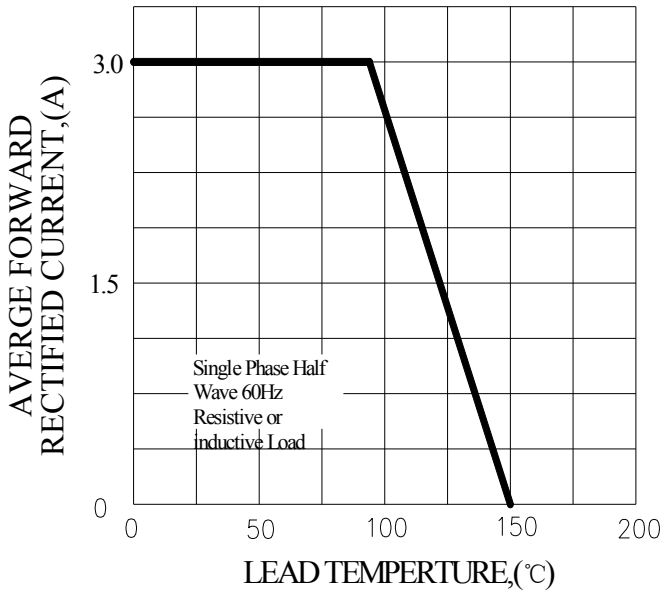


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

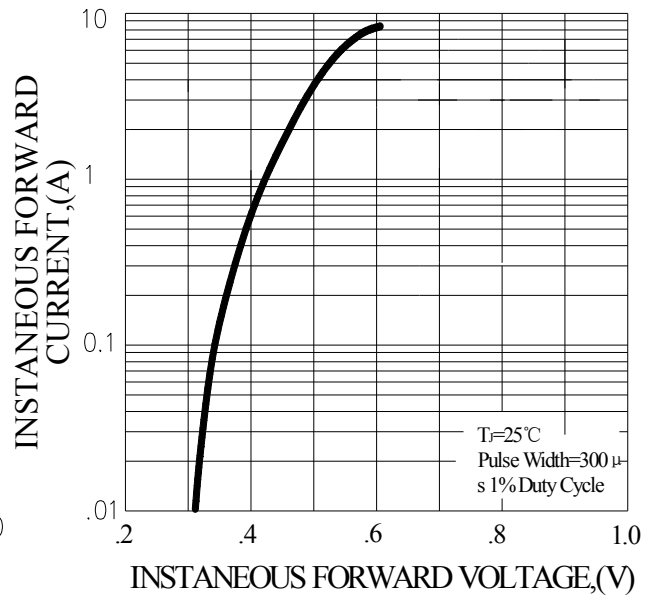


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

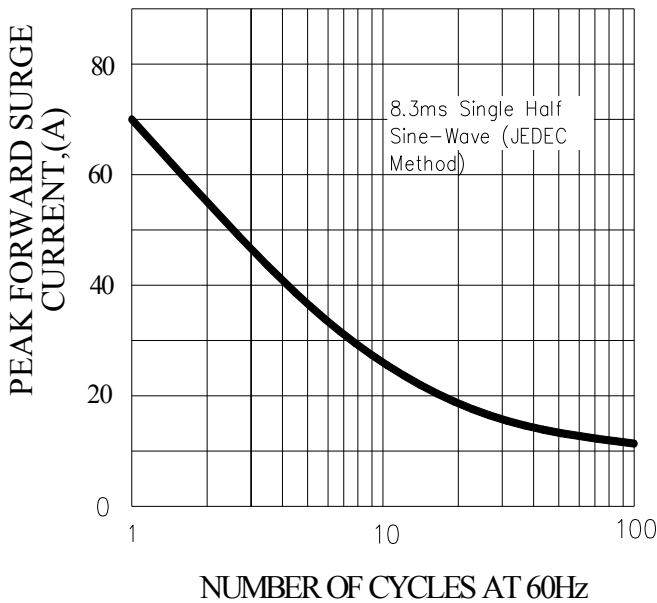


FIG.4-TYPICAL REVERSE CHARACTERISTICS

