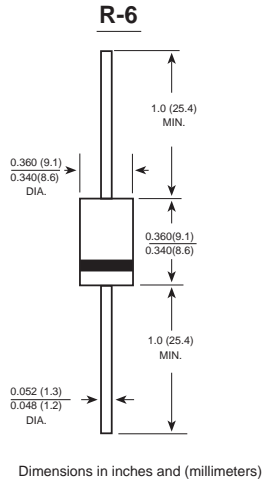


# 15SQ045

## SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 45 Volts Forward Current - 15 Amperes



### FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Low power loss,high efficiency
- ◆ Ultralow forward voltage,high current capability
- ◆ High forward surge current capability
- ◆ For use in low voltage,high frequency inverters free wheeling,and polarity protection applications

### MECHANICAL DATA

**Case:** R-6 molded plastic body

**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:**0.072 ounce, 2.05 grams

### 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 current derate by 20%.

	SYMBOLS	15SQ045	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	45	VOLTS
Maximum RMS voltage	$V_{RMS}$	32	VOLTS
Maximum DC blocking voltage	$V_{DC}$	45	VOLTS
Maximum average forward rectified current	$I_{(AV)}$	15	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	320	Amps
Maximum instantaneous forward voltage at 15A	$V_F$	0.50	Volts
Maximum DC reverse current $T_J=25^{\circ}C$ at rated DC blocking voltage $T_J=100^{\circ}C$	$I_R$	0.5 20	mA
Typical thermal resistance (NOTE 1)	$R_{\theta JC}$	2.5	$^{\circ}C/W$
	$R_{\theta JL}$	2.0	
	$R_{\theta JA}$	45	
Operating junction temperature range	$T_J$	-50 to +200	$^{\circ}C$
Storage temperature range	$T_{STG}$	-50 to +200	$^{\circ}C$

# RATINGS AND CHARACTERISTIC CURVES 15SQ045

FIG. 1- FORWARD CURRENT DERATING CURVE

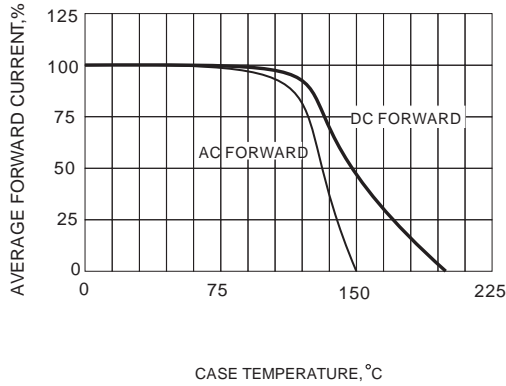


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD

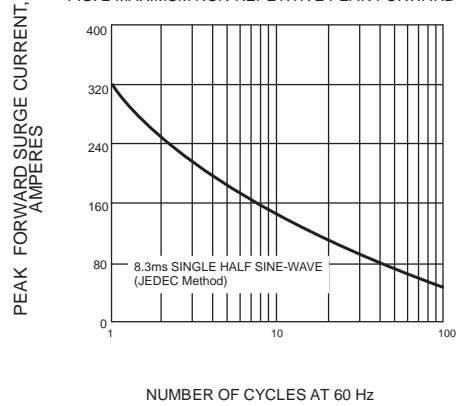


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

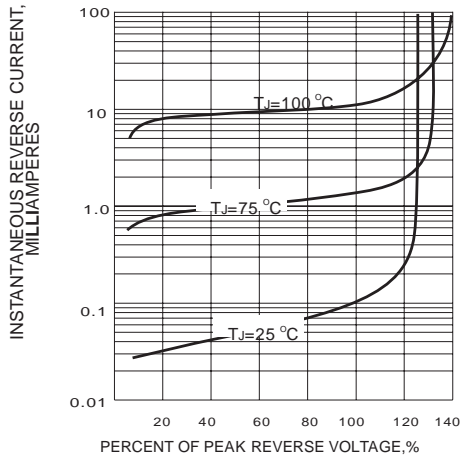


FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

