

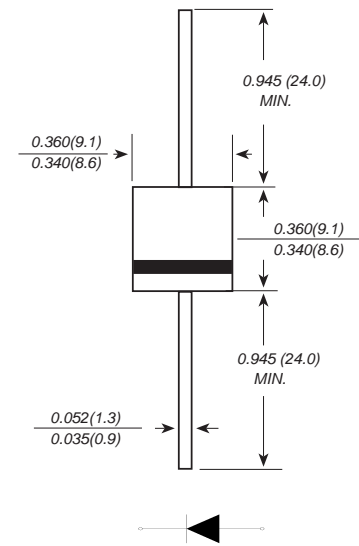
## 20SQ030~20SQ100

### 20.0Amp Schottky Barrier Rectifiers

### Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Guardring for overvoltage protection
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed  
250°C/10 seconds at terminals

### R-6



Dimensions in inches and (millimeters)

### Mechanical Data

**Case :** Molded plastic body

**Terminals :** Solder plated, solderable per MIL-STD-750, Method 2026

**Polarity :** Polarity symbol marking on body

**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%.

Parameter	SYMBOLS	20SQ030	20SQ035	20SQ040	20SQ045	20SQ060	20SQ080	20SQ100	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	35	40	45	60	80	100	V
Maximum RMS voltage	$V_{RMS}$	14	24.5	28	31.5	42	56	70	V
Maximum DC blocking voltage	$V_{DC}$	20	35	40	45	60	80	100	V
Maximum average forward rectified current at $T_L=100^\circ\text{C}$	$I_{(AV)}$	20.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	300.0							A
Maximum instantaneous forward voltage at 20.0A	$V_F$	0.55				0.70	0.85		V
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	$I_R$	0.5 50					0.05 10		mA
Typical thermal resistance	$R_{qJA}$	40.0							$^\circ\text{C/W}$
Operating junction temperature range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

## Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

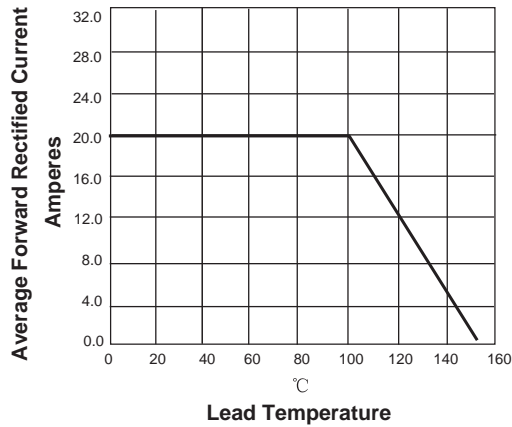


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

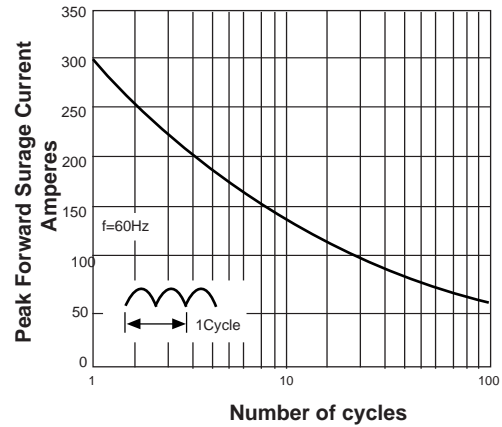


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

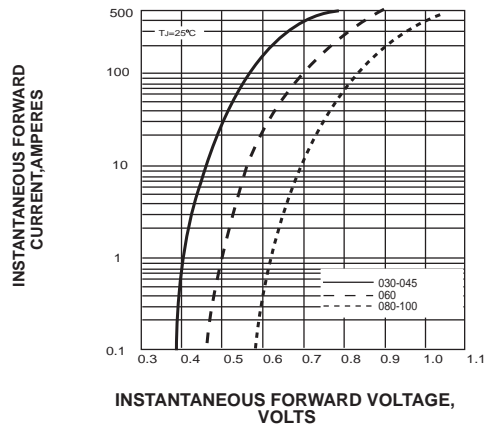


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

