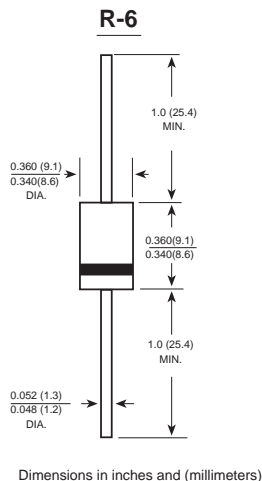


20SQ045

SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 45 Volts Forward Current - 20 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	20SQ045	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	$I_{(AV)}$	20	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	350	Amps
Maximum instantaneous forward voltage at 20A	V_F	0.55	Volts
Maximum DC reverse current $T_J=25^\circ\text{C}$ at rated DC blocking voltage $T_J=100^\circ\text{C}$	I_R	0.5 20	mA
Typical thermal resistance (NOTE 1)	$R_{\theta JC}$	2.2	$^\circ\text{C/W}$
	$R_{\theta JL}$	2.0	
	$R_{\theta JA}$	45	
Operating junction temperature range	T_J	-50 to +200	$^\circ\text{C}$
Storage temperature range	T_{STG}	-50 to +200	$^\circ\text{C}$

RATINGS AND CHARACTERISTIC CURVES 20SQ045

FIG. 1- FORWARD CURRENT DERATING CURVE

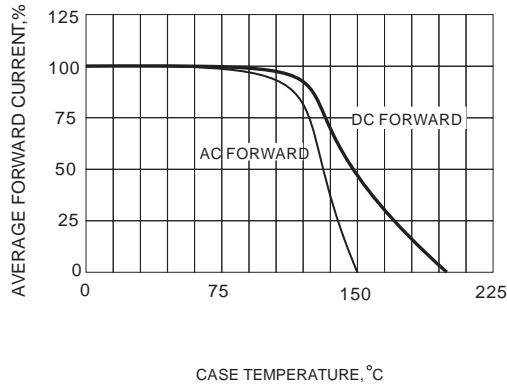


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD

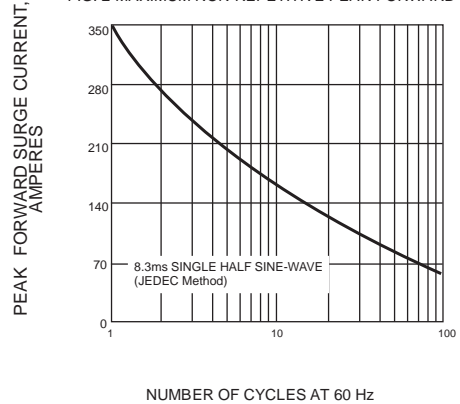


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

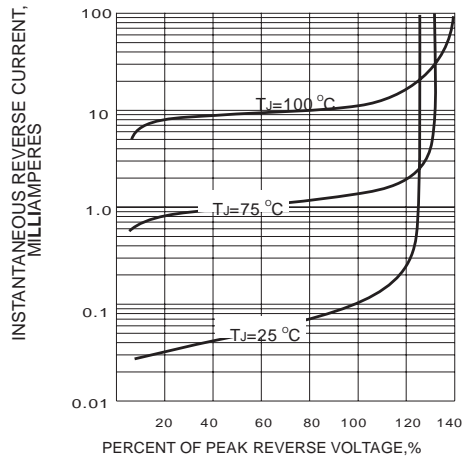


FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

