

SCHOTTKY BARRIER RECTIFIERS

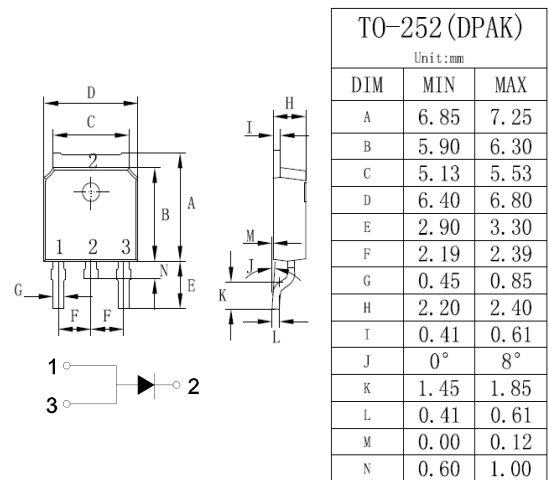
VOLTAGE	20 to 200 Volts
CURRENT	10 Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For through hole applications
- Low profile package
- Built-in strain relief
- Low power loss, High efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Lead free in comply with EU RoHS

MECHANICAL DATA

- Case: TO-252 molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marking

TO-252 (DPAK)

MAXIMUM RATINGS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	SK 1020D	SK 1040D	SK 1045D	SK 1050D	SK 1060D	SK 1080D	SK 10100D	SK 10150D	SK 10200D	UNITS	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	45	50	60	80	100	150	200	V	
Maximum RMS Voltage	V_{RMS}	14	28	31.5	35	42	56	70	105	140	V	
Maximum DC Blocking Voltage	V_{DC}	20	40	45	50	60	80	100	150	200	V	
Maximum Average Forward (See Figure 1)	$I_{F(AV)}$	10									A	
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	150									A	
Maximum Forward Voltage at 10A per leg	V_F	0.55		0.70		0.85		0.90	0.92		V	
Maximum DC Reverse Current at $T_j=25^\circ\text{C}$ Rated DC Blocking Voltage $T_j=100^\circ\text{C}$	I_R					0.2					mA	
Typical Thermal Resistance Note 1	$R_{\theta JC}$						25					°C / W
Operating Junction and Storage Temperature Range	T_j, T_{STG}	-55 to +150							-55 to +175		°C	

Note 1: Mounted on FR-4 PCB Copper, minimum recommended pad layout

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

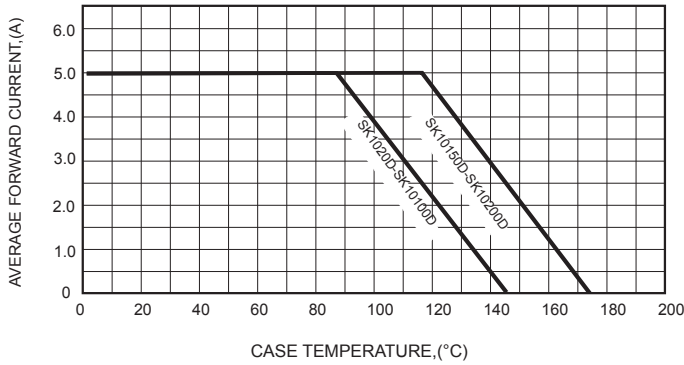


FIG.2-TYPICAL FORWARD CHARACTERISTICS

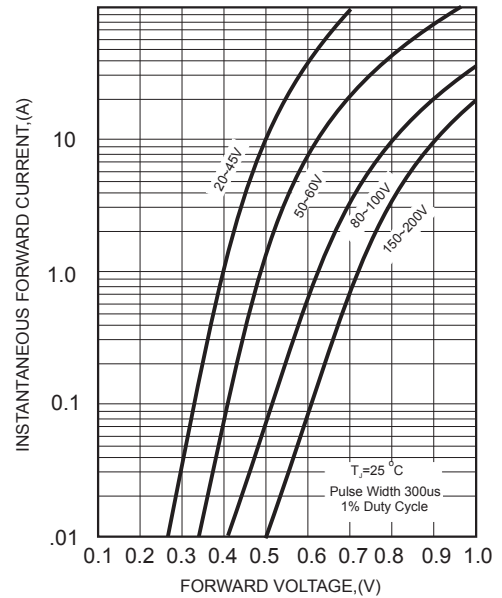


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

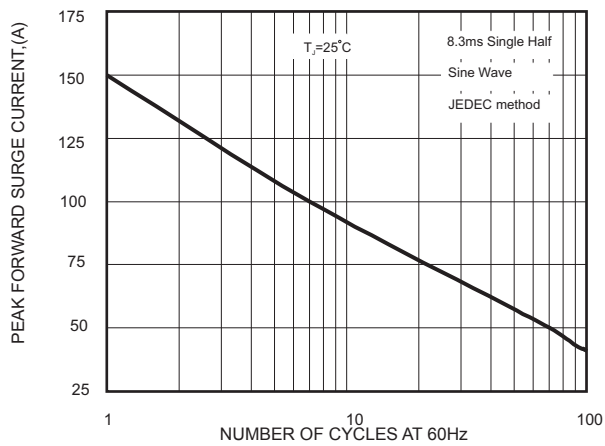
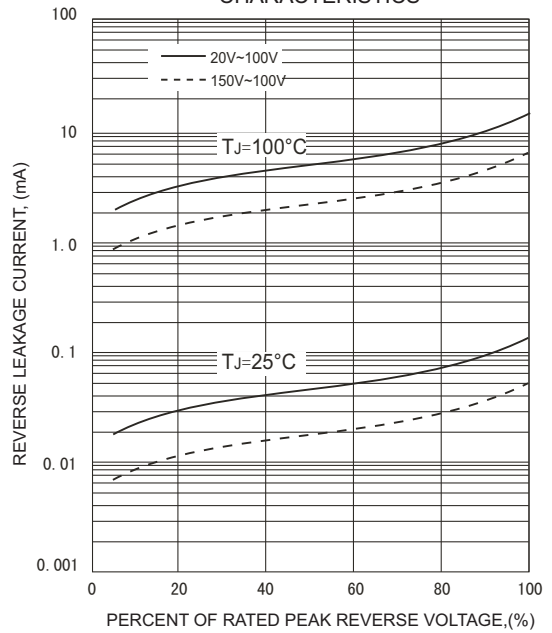


FIG.4-TYPICAL REVERSE CHARACTERISTICS



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