

## SCHOTTKY BARRIER RECTIFIERS

VOLTAGE	20 to 200 Volts
CURRENT	8 Amperes

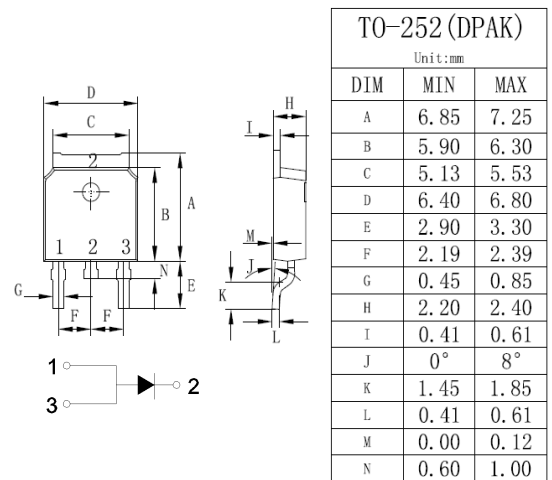
### FEATURES

- 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 820D	SK 840D	SK 845D	SK 850D	SK 860D	SK 880D	SK 8100D	SK 8150D	SK 8200D	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)	$I_{F(AV)}$	8									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 8A 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 $T_j=100^\circ\text{C}$	$I_R$					0.5				20	mA
Typical Thermal Resistance Note 1	$R_{\theta JC}$					15					$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	$T_j, T_{STG}$	-55 to +125								-55 to +150	$^\circ\text{C}$

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

# RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

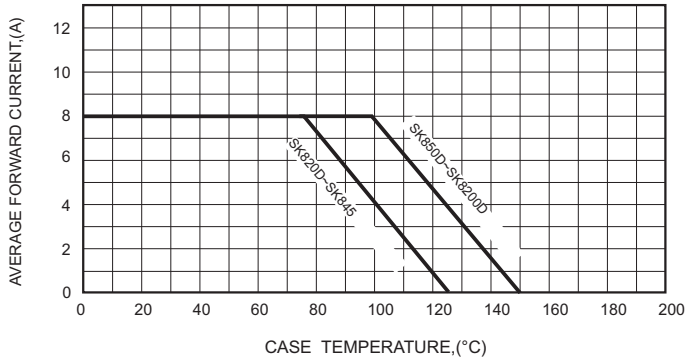


FIG.2-TYPICAL FORWARD CHARACTERISTICS

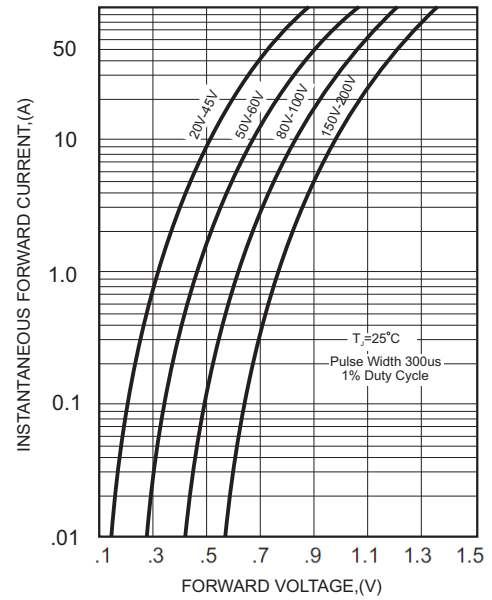


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

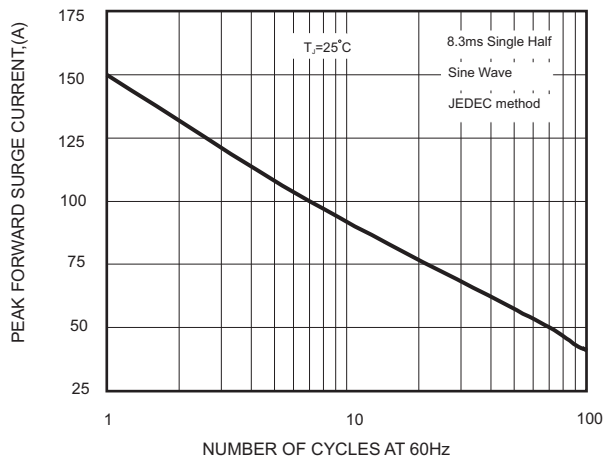
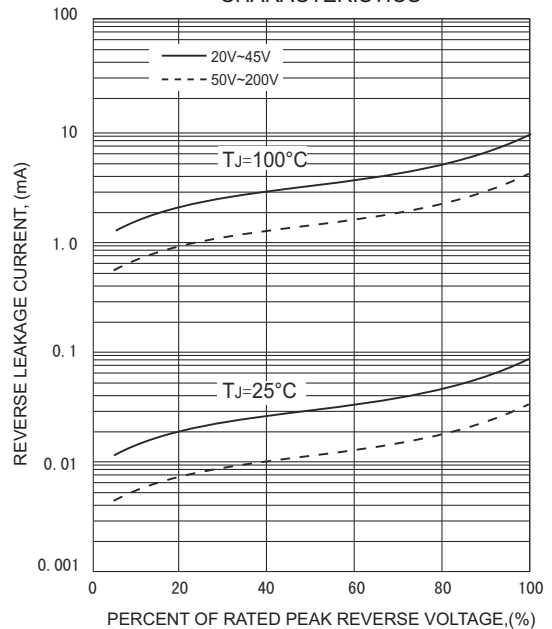


FIG.4- TYPICAL REVERSE CHARACTERISTICS



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