

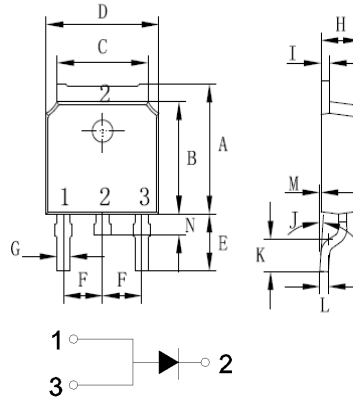
#### Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-0

#### TO-252/DPAK

#### Mechanical Data

- Case: TO-252/DPAK, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Mounting Position: Any
- **Lead Free: For RoHS / Lead Free Version**



TO-252 (DPAK)		
Unit:mm		
DIM	MIN	MAX
A	6.85	7.25
B	5.90	6.30
C	5.13	5.53
D	6.40	6.80
E	2.90	3.30
F	2.19	2.39
G	0.45	0.85
H	2.20	2.40
I	0.41	0.61
J	0°	8°
K	1.45	1.85
L	0.41	0.61
M	0.00	0.12
N	0.60	1.00

#### Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	SK 840D	SK 845D	SK 850D	SK 860D	SK 880D	SK 8100D	SK 8150D	SK 8200D	Units	
Peak Repetitive Reverse Voltage	$V_{RRM}$	40	45	50	60	80	100	150	200	V	
Working Peak Reverse Voltage	$V_{RWM}$										
DC Blocking Voltage	$V_R$										
RMS Reverse Voltage	$V_{R(RMS)}$	28	31	35	42	56	70	105	140	V	
Average Rectified Output Current @ $T_L = 75^\circ\text{C}$ (Note 1)	$I_O$	8.0								A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150								A	
Forward Voltage @ $I_F = 8\text{A}$	$V_{FM}$	0.55		0.70		0.85		0.92		V	
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	$I_{RM}$	0.1								20	mA
Typical Junction Capacitance (Note 2)	$C_j$	350		280				200		pF	
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	15								$^\circ\text{C/W}$	
Operating and Storage Temperature Range	$T_j, T_{STG}$	-55 to +125				-55 to +150				$^\circ\text{C}$	

Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

## RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

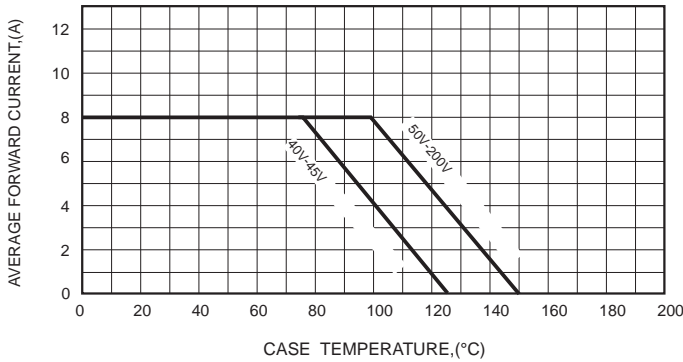


FIG.2-TYPICAL FORWARD CHARACTERISTICS

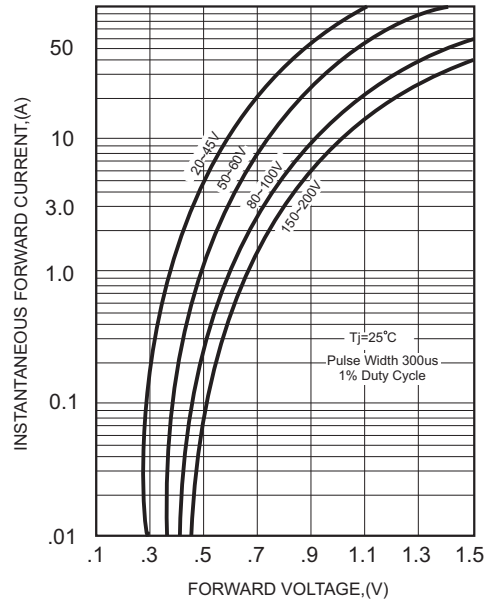


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

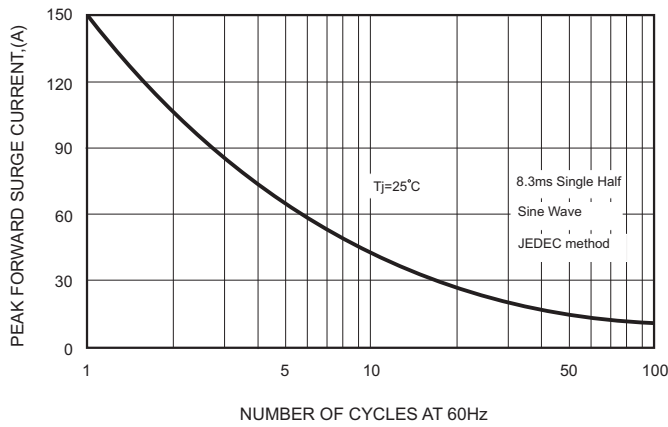


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

