

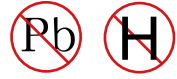


YEA SHIN TECHNOLOGY CO., LTD

SK1020D THRU SK10200D

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE - 20 to 200 Volts CURRENT - 10 Amperes

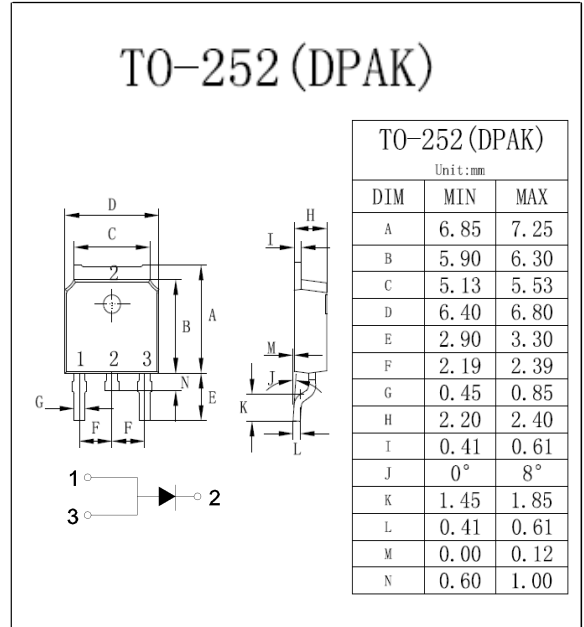


Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Extremely low v_f
- Low stored charge majority carrier conduction
- Low power loss/high efficiency

Mechanical Data

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



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	0.60		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					20					mA
Typical Thermal Resistance Note 1	$R_{\theta JC}$	25										$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	T_j, T_{STG}	-55 to +150				-55 to +150			-55 to +175		$^\circ\text{C}$	

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

DEVICE CHARACTERISTICS

SK1020D THRU SK1020D

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

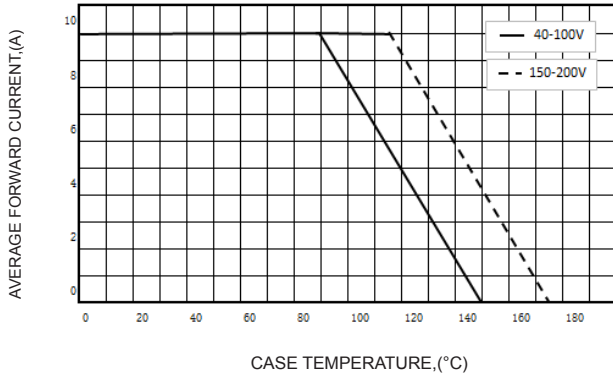


FIG.2-TYPICAL FORWARD CHARACTERISTICS

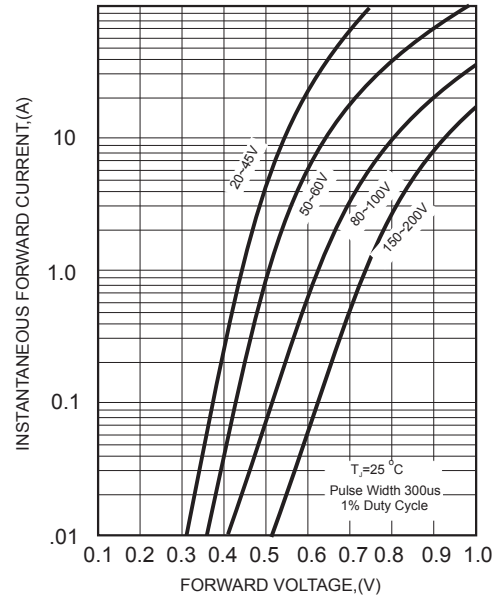


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

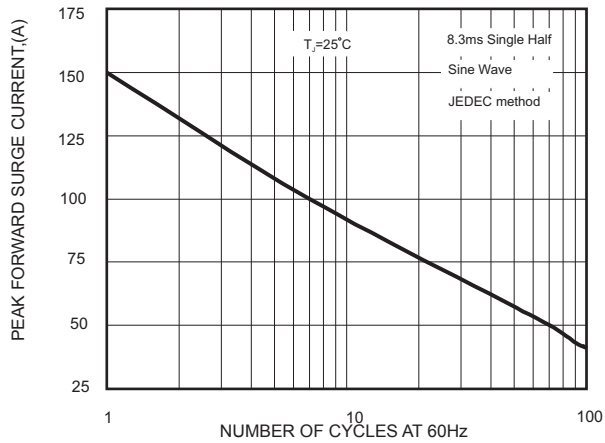


FIG.4-TYPICAL REVERSE CHARACTERISTICS

