

**10.0A SCHOTTKY BARRIER RECTIFIERS - 40V- 100V  
DPAK PACKAGE**

**Features**

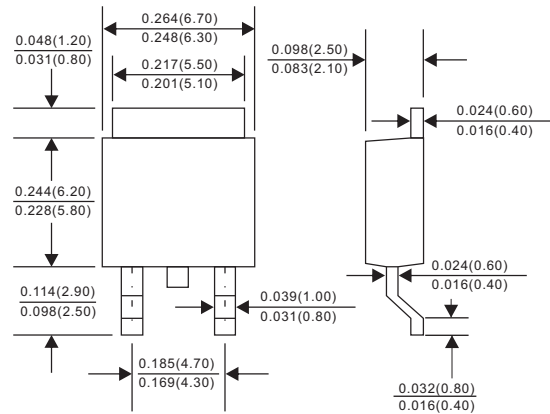
- Batch process design, excellent power dissipation offers better reverse leakage current and thermal resistance.
- Low profile surface mounted application in order to optimize board space.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- High surge capability.
- Guardring for overvoltage protection.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.
- **Moisture Sensitivity Level 1**

**Mechanical data**

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, TO-252 / DPAK
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Mounting Position : Any
- Weight : Approximated 0.34 gram

**Package outline**

DPAK



Dimensions in inches and (millimeters)

**Maximum ratings and Electrical Characteristics (AT T<sub>A</sub>=25°C unless otherwise noted)**

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.1	I <sub>O</sub>			10.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I <sub>FSM</sub>			150	A
Reverse current	V <sub>R</sub> = V <sub>RRM</sub> T <sub>J</sub> = 25°C	I <sub>R</sub>			0.5	mA
	V <sub>R</sub> = V <sub>RRM</sub> T <sub>J</sub> = 100°C				20	
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C <sub>J</sub>		700		pF
Storage temperature		T <sub>STG</sub>	-55		+150	°C

SYMBOLS	V <sub>RRM</sub> *1 (V)	V <sub>RMS</sub> *2 (V)	V <sub>R</sub> *3 (V)	V <sub>F</sub> *4 (V)	Operating temperature T <sub>J</sub> , (°C)
SKFM1040Y-D	40	28	40	0.55	-55 to +125
SKFM1045Y-D	45	31.5	45		
SKFM1060Y-D	60	42	60	0.70	-55 to +150
SKFM10100Y-D	100	70	100		

\*1 Repetitive peak reverse voltage

\*2 RMS voltage

\*3 Continuous reverse voltage

\*4 Maximum forward voltage@ I<sub>F</sub> = 10.0A



### Rating and characteristic curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

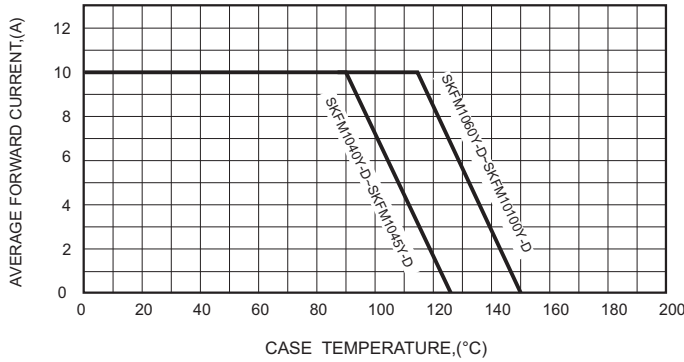


FIG.2-TYPICAL FORWARD CHARACTERISTICS

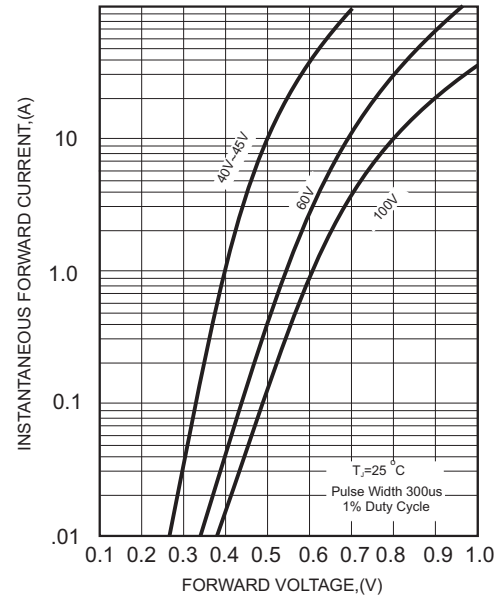


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

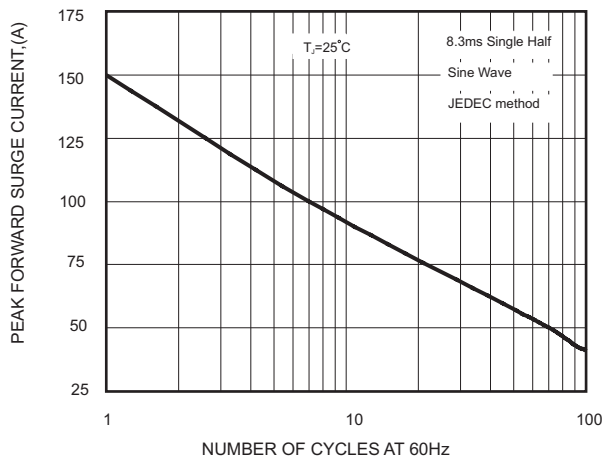


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

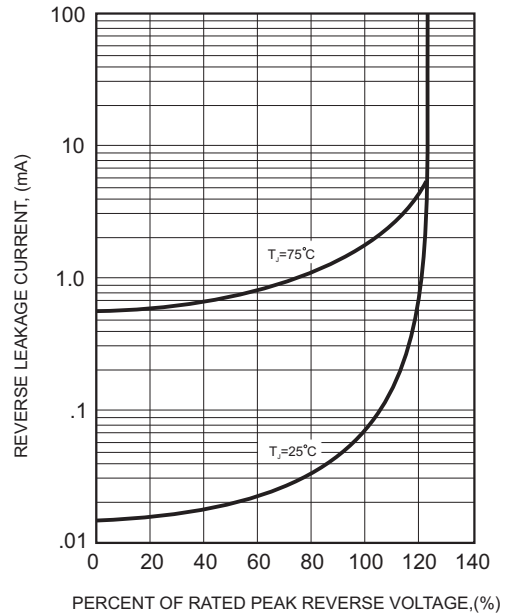
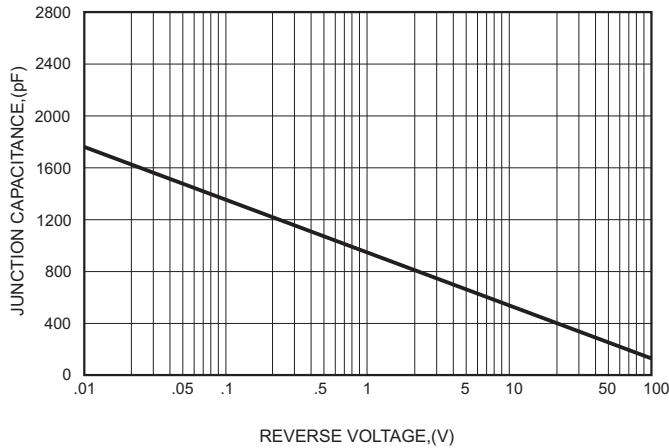
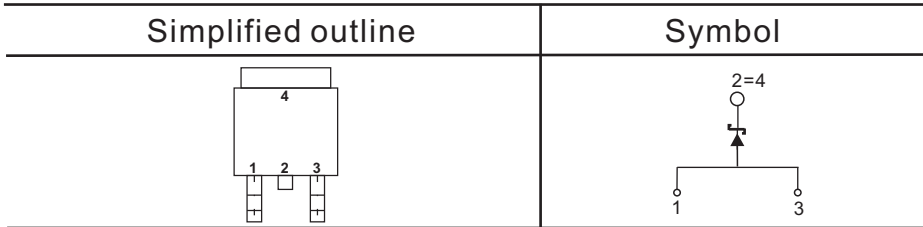


FIG.5-TYPICAL JUNCTION CAPACITANCE





### Pinning information



### Reel packing

PACKAGE	REEL SIZE	REEL (pcs)	COMPONENT SPACING (m/m)	BOX (pcs)	INNER BOX (m/m)	REEL DIA, (m/m)	CARTON SIZE (m/m)	CARTON (pcs)	APPROX. GROSS WEIGHT (kg)
DPAK/TO-252	13"	3,000	8.0	6,000	335*335*43	330	350*330*360	48,000	22.0

### Marking

Type number	Marking code
SKFM1040Y-D-TH	SK1040Y
SKFM1045Y-D-TH	SK1045Y
SKFM1060Y-D-TH	SK1060Y
SKFM10100Y-D-TH	SK10100Y

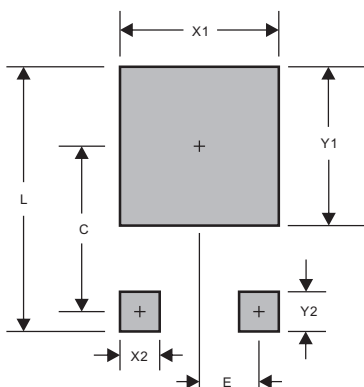
Note: D: Package code, DPAK  
-T: Taping Reel

### Pb-Free package is available

RoHS product for packing code suffix "G"

Halogen free product for packing code suffix "H"

### Suggested solder pad layout



PACKAGE	DPAK
C	0.272(6.90)
E	0.091(2.30)
L	0.457(11.60)
X1	0.276(7.00)
X2	0.059(1.50)
Y1	0.276(7.00)
Y2	0.098(2.50)

Dimensions in inches and (millimeters)



# WILLAS



10.0A SCHOTTKY BARRIER RECTIFIERS - 40V- 100V  
DPAK PACKAGE

SKFM1040Y-D  
THRU  
SKFM10100Y-D

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