

### Features

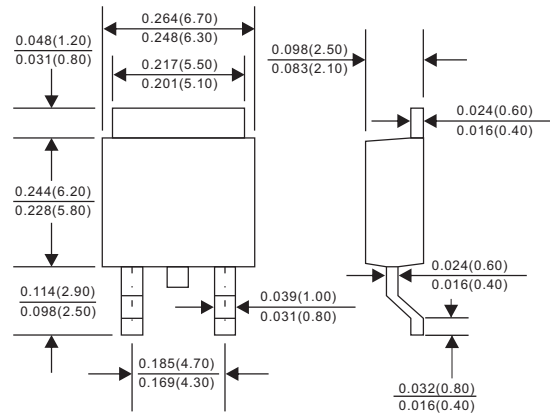
- Batch process design, excellent power dissipation offers better reverse leakage current and thermal resistance.
- Low profile surface mounted application in order to optimize board space.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- High surge capability.
- 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 $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.1	$I_o$			10.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	$I_{FSM}$			150	A
Reverse current	$V_R = V_{RRM} \quad T_J = 25^{\circ}\text{C}$	$I_R$			0.5	mA
	$V_R = V_{RRM} \quad T_J = 100^{\circ}\text{C}$				20	
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	$C_J$		700		pF
Storage temperature		$T_{STG}$	-55		+150	$^{\circ}\text{C}$

SYMBOLS	$V_{RRM}^{*1}$ (V)	$V_{RMS}^{*2}$ (V)	$V_R^{*3}$ (V)	$V_F^{*4}$ (V)	Operating temperature $T_J$ , ( $^{\circ}\text{C}$ )
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@  $I_F = 10.0\text{A}$



### Rating and characteristic curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

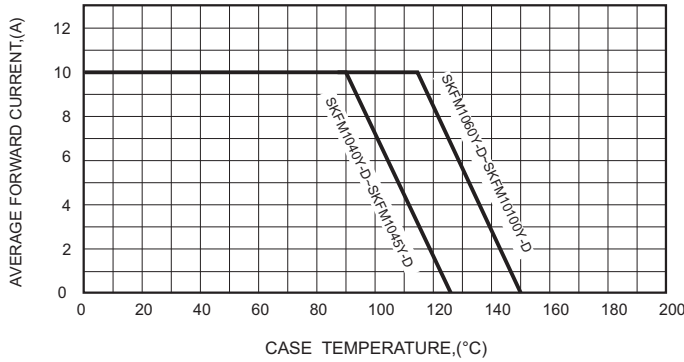


FIG.2-TYPICAL FORWARD CHARACTERISTICS

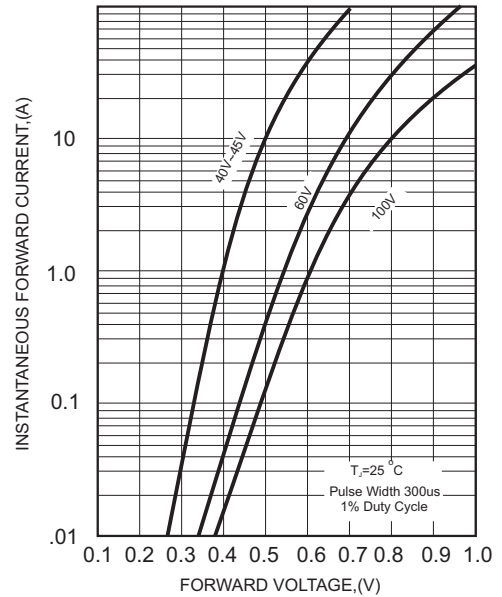


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

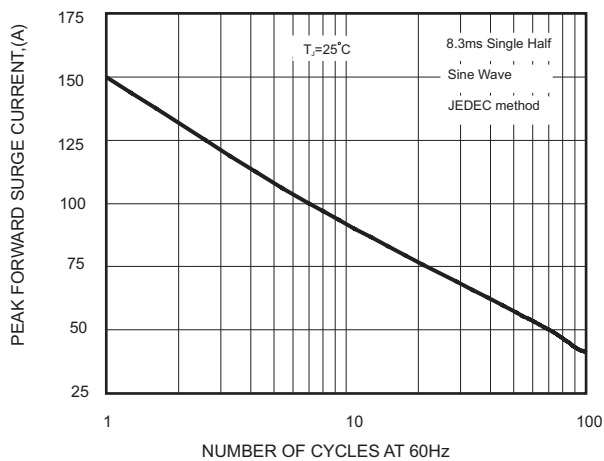


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

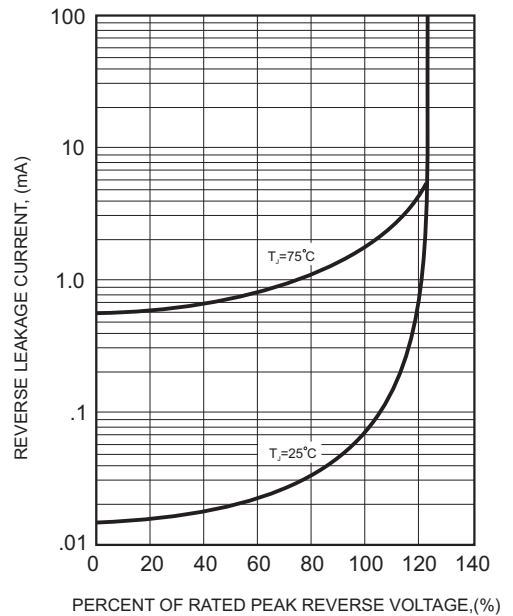
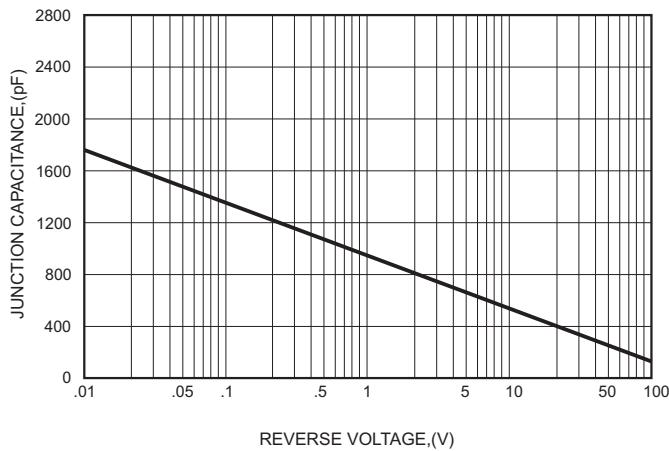


FIG.5-TYPICAL JUNCTION CAPACITANCE





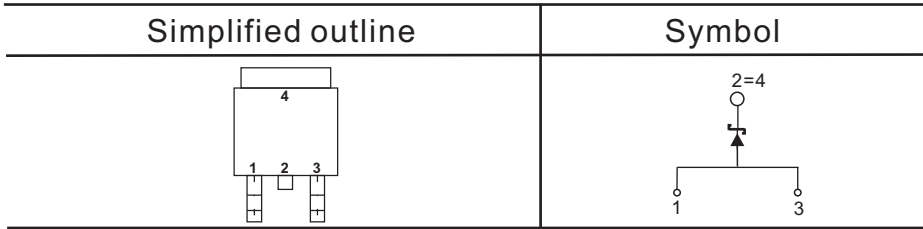
# WILLAS



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

## SKFM1040Y-D THRU SKFM10100Y-D

### 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

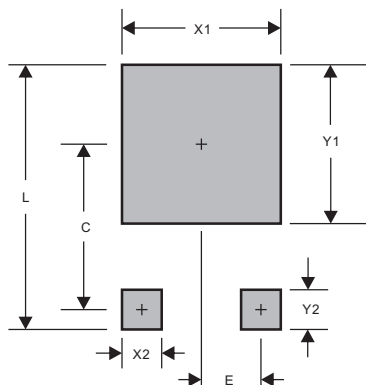
Note: D: Package code, DPAK  
-T: Taping Reel

### 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

**\*\*\*Disclaimer\*\*\***

WILLAS reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. WILLAS or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on WILLAS data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. WILLAS does not assume any liability arising out of the application or use of any product or circuit.

WILLAS products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of WILLAS. Customers using or selling WILLAS components for use in such applications do so at their own risk and shall agree to fully indemnify WILLAS Inc and its subsidiaries harmless against all claims, damages and expenditures.