

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.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228
- Suffix "-H" for Halogen-free part, ex. SKFM10100C-D17.

Mechanical data

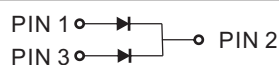
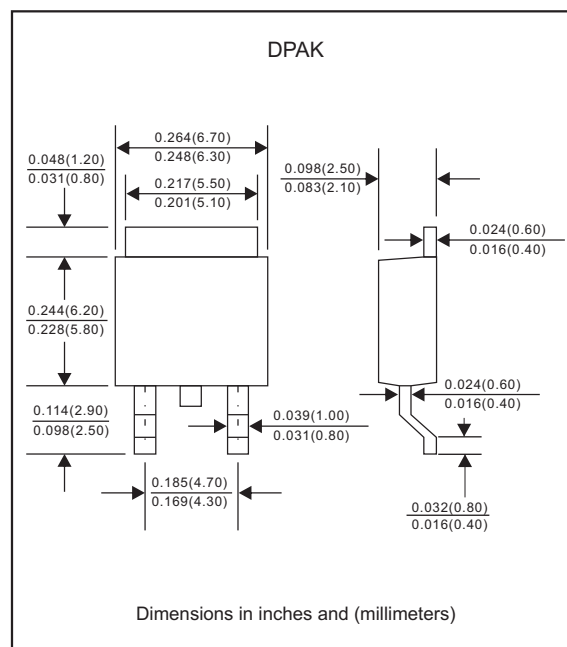
- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, TO-252 / DPAK
- Terminals : Solder plated, solderable p
MIL-STD-750, Method 2026^r
- Mounting Position : Any
- Weight : Approximated 0.34 gram

Pb-Free package is available

RoHS product for packing code suffix "G"

Halogen free product for packing code suffix "H"

Package outline



A

Absolute Maximum Ratings (Ta = 25 °C)

ITEM	Symbol	Conditions	Rating	Unit
Maximum repetitive peak reverse voltage	V _{RRM}		100	V
Maximum RMS voltage	V _{RMS}		70	V
Average forward current	I _{F(AV)}		10	A
Peak forward surge current	I _{FSM}	8.3ms single half sine-wave	100	A
Operating junction temperature Range	T _J		-55 to +150	°C
Storage temperature Range	T _{STG}		-65 to +175	°C

Electrical characteristics (Ta = 25 °C)

ITEM	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V _F	I _F = 3A I _F = 5A	- -	- -	0.75 0.85	V
Repetitive peak reverse current	I _{RRM}	V _R = 90V V _R = 100V T _J = 25 °C T _J = 25 °C	- -	- -	0.15 0.50	mA



Rating and characteristic curves (SKFM10100C-D17)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

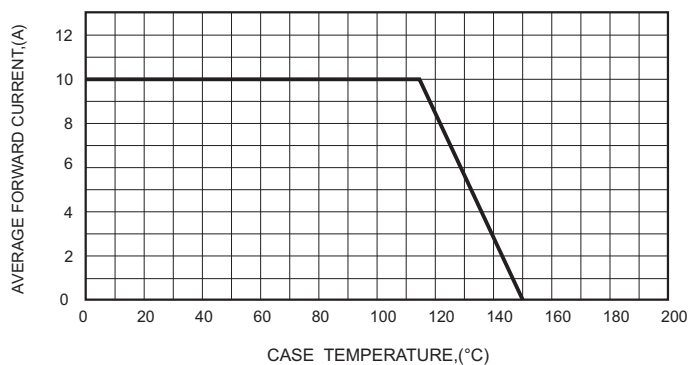


FIG.2-TYPICAL FORWARD CHARACTERISTICS

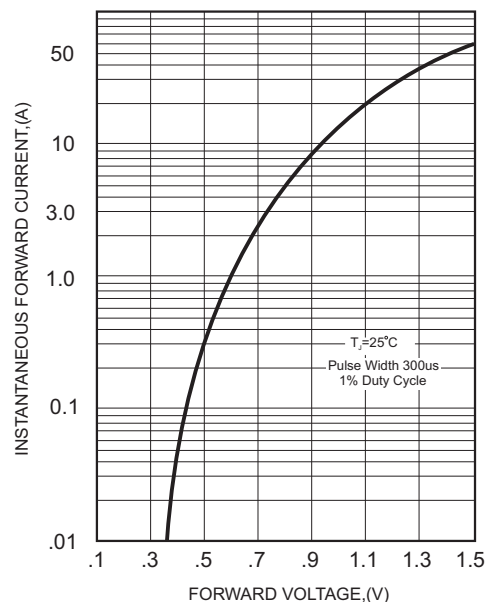


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

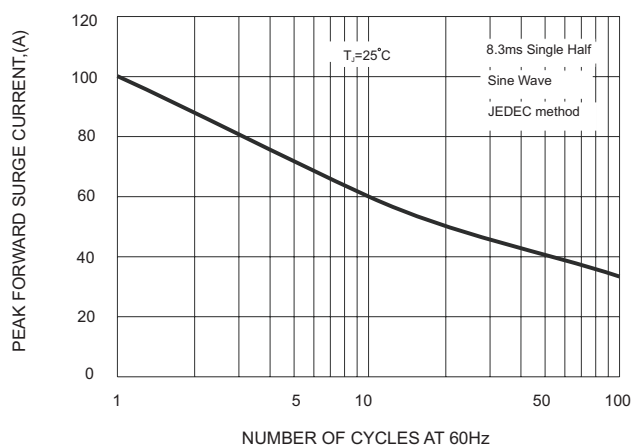
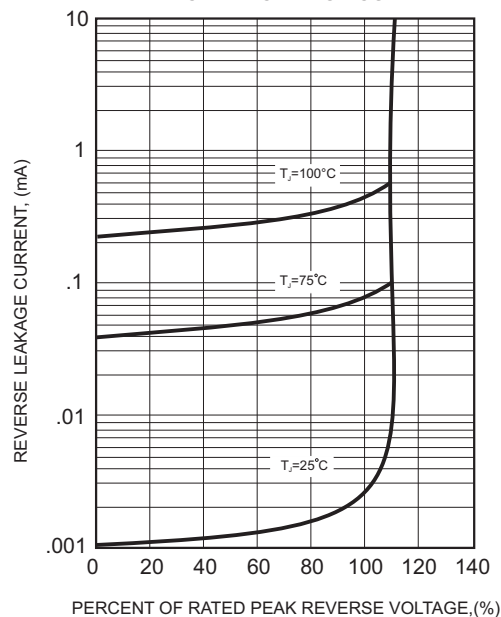
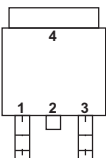
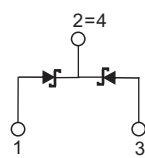


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



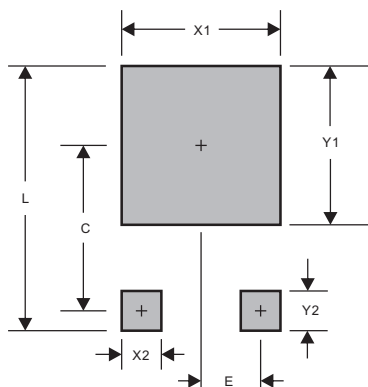
Pinning information

Simplified outline	Symbol
	

Marking

Type number	Marking code
SKFM10100C-D17	SK10100

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)