



6.0A Surface Mount Schottky Barrier Rectifiers - 40~200V

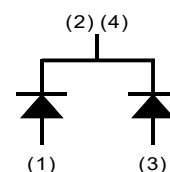
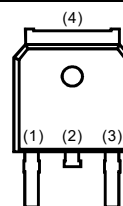
PRIMARY CHARACTERISTICS

V_{RRM}	40V~200V
I_O	6.0A
V_F	0.55V, 0.7V, 0.85V, 0.95V
$T_{J,Max}$	150°C

SCHEMATIC DIAGRAM TO-252 PACKAGE

Marking

Type number	Marking code
SKFM640CW-D	SK640、MBR640CS
SKFM645CW-D	MBR645CS
SKFM660CW-D	MBR660CS
SKFM6100W-D	MBR6100CS
SKFM6150CW-D	MBR6150CS
SKFM6200CW-D	MBR6200CS



Pin1, 3 Anode Pin2, 4 Cathode

FEATURES

- Low reverse leakage
- High forward surge current capability
- Construction utilizes void-free molded plastic technique
- High temperature soldering guaranteed 260°C/10 seconds at terminals.
- Moisture Sensitivity Level 1

MECHANICAL DATA

- Case : Molded plastic, TO-252
- Polarity : Shown above
- Terminals : Plated terminals, solderable per MIL-STD-750, Method 2026
- Epoxy : UL94-V0 rated flame retardant

Maximum ratings and electrical characteristics (At $T_A=25^\circ\text{C}$ unless otherwise noted)

Rating at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	Symbol	SKFM 640CW-D	SKFM 645CW-D	SKFM 660CW-D	SKFM 6100CW-D	SKFM 6150CW-D	SKFM 6200CW-D	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	40	45	60	100	150	200	V
Maximum RMS voltage	V _{RMS}	28	31.5	42	70	105	140	V
Maximum DC blocking voltage	V _{DC}	40	45	60	100	150	200	V
Maximum average forward rectified (Per device)	I _(AV)	6.0						A
Current at T _c =110°C (Per diode)		3.0						
Peak forward surge current 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	I _{FSM}	80.0						A
Maximum instantaneous forward voltage per diode at 3.0A	V _F	0.55		0.7	0.85	0.95		V
Maximum DC reverse current T _A =25°C	I _R	0.05			0.05			mA
At rated DC blocking voltage T _A =100°C		20			10			
Typical thermal resistance	R _{θJC}	2.5						°C/W
Operating junction temperature range	T _J	+150						°C
Storage temperature range	T _{STG}	-55 to +150						°C



Rating and characteristic curves (SKFM640CW-D Thru SKFM6200CW-D)

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

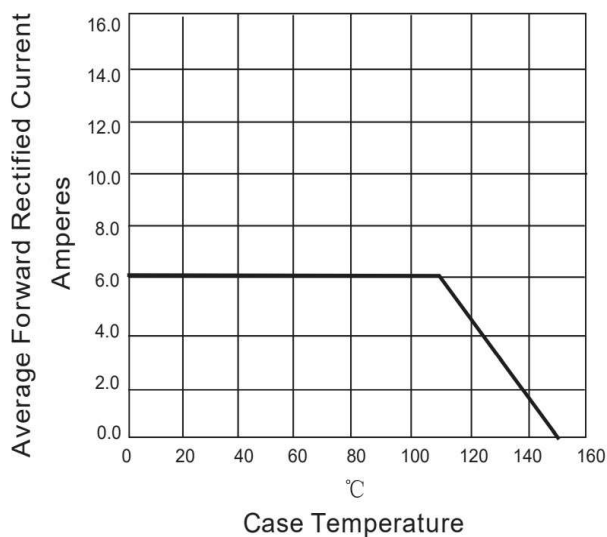


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

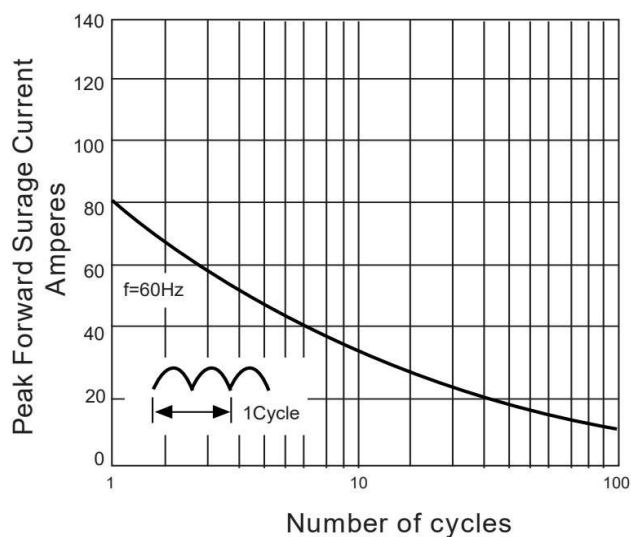


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

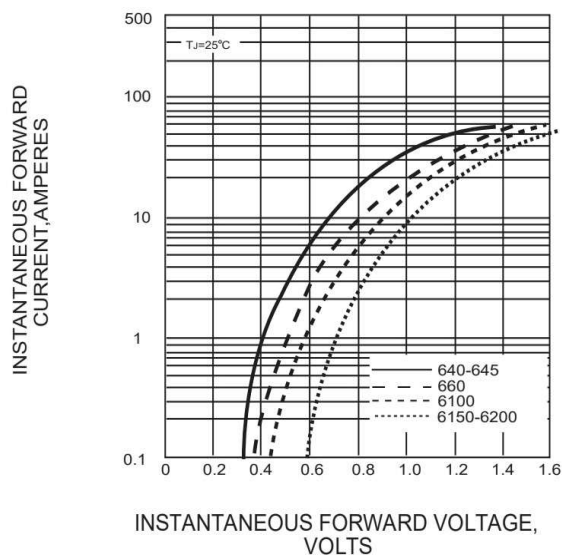
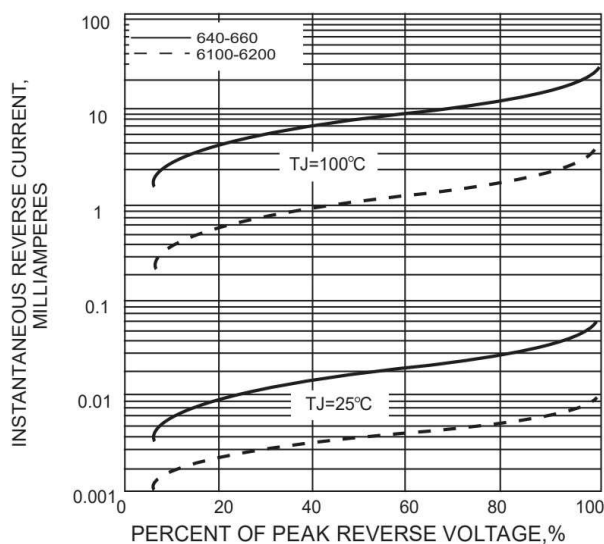
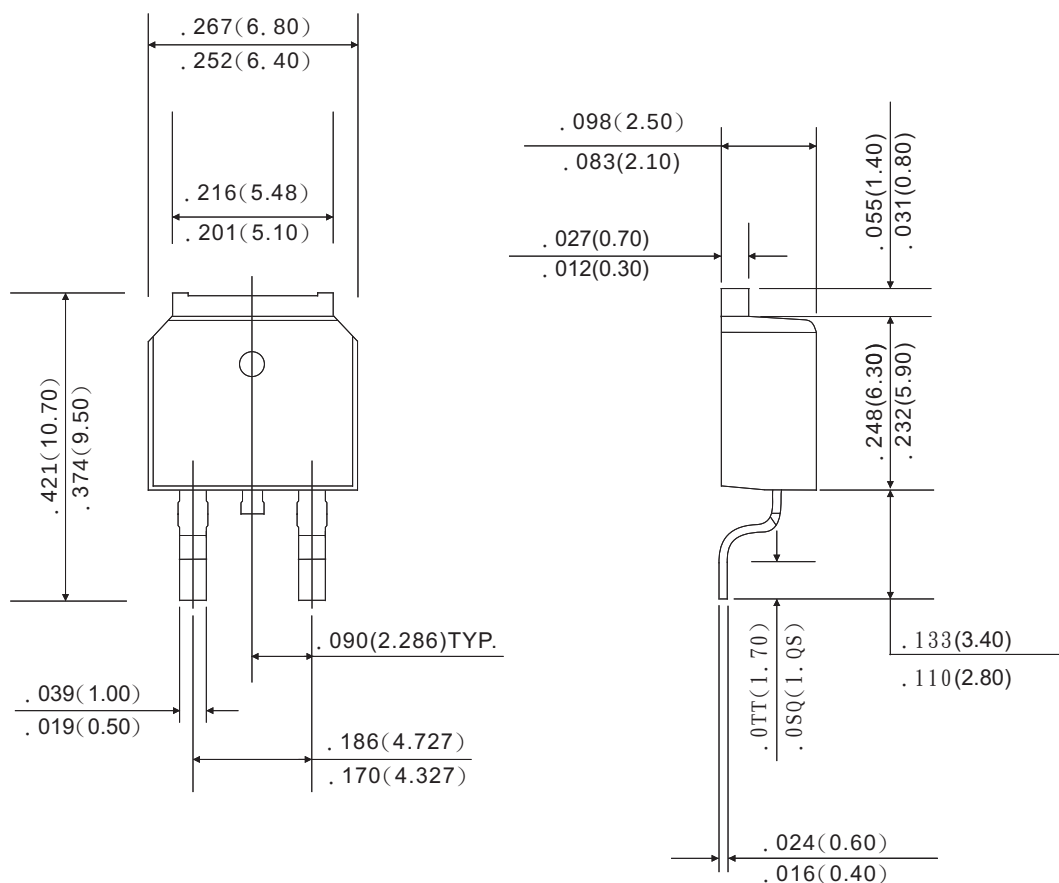


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Outline Drawing

TO-252(j)



Dimensions in inches and (millimeters)

Rev.C

Ordering Information:

Device PN	Packing
Part Number -T ⁽¹⁾ H ⁽²⁾ -WS ⁽³⁾	Tape&Reel: 2.5 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) Halogen free product for packing code suffix "H"

(3) Willas brand abbreviation, Label Type does not display

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