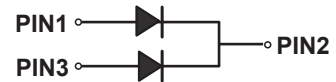
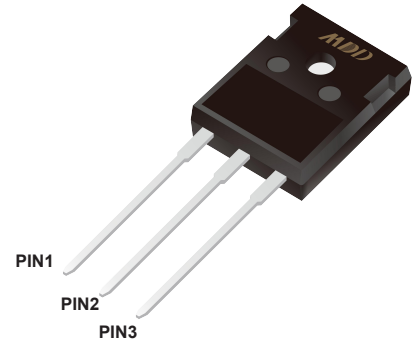


SCHOTTKY BARRIER RECTIFIER

Features

- ◆ High current capability
 - ◆ Low forward voltage drop
 - ◆ Low power loss, high efficiency
 - ◆ High surge capability
 - ◆ High temperature soldering guaranteed
- Mounting position: any

TO-247-3L



Mechanical Data

- Case : JEDEC TO-247-3L Molded plastic body
- Weight : 0.07ounce, 2.1 grams
- Terminals: Lead solderable per MIL-STD-202, Method 208

Maximum Ratings And Electrical Characteristics

Ratings 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	SYMBOLS	MDD MBRW 4045DCT	MDD MBRW 4060DCT	MDD MBRW 40100DCT	MDD MBRW 40150DCT	MDD MBRW 40200DCT	UNITS
Marking Code							
Maximum repetitive peak reverse voltage	V_{RRM}	45	60	100	150	200	V
Maximum RMS voltage	V_{RMS}	32	42	70	135	140	V
Maximum DC blocking voltage	V_{DC}	45	60	100	150	200	V
Maximum average forward rectified current (see fig.1)	$I_{(AV)}$	40.0					A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	250			200		A
Maximum instantaneous forward voltage at 20.0A	V_F	0.70	0.75	0.85	0.90	0.95	V
Maximum DC reverse current at rated DC blocking voltage	I_R	0.1					mA
$T_A=25^{\circ}C$ $T_A=100^{\circ}C$		20.0	30.0	10.0			
Typical thermal resistance (NOTE 2)	$R_{\theta JC}$	2.0					$^{\circ}C/W$
Operating junction temperature range	T_J	-55 to +150					$^{\circ}C$
storage temperature range	T_{STG}	-55 to +150					$^{\circ}C$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to case.

Ratings And Characteristic Curves

Fig.1 Typical Forward Current Derating Curve

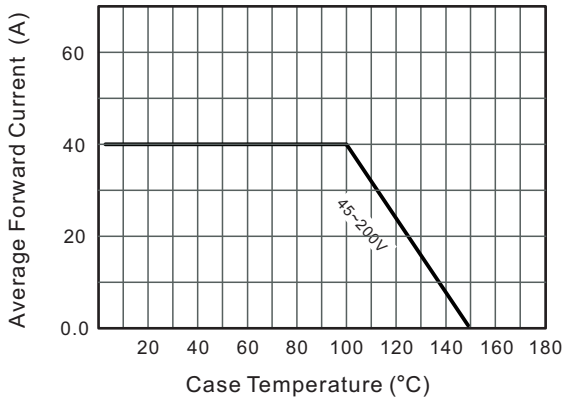


Fig.2 Typical Reverse Characteristics

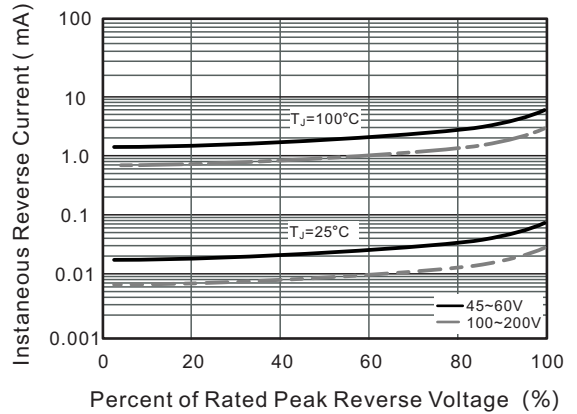


Fig.3 Typical Forward Characteristic(per leg)

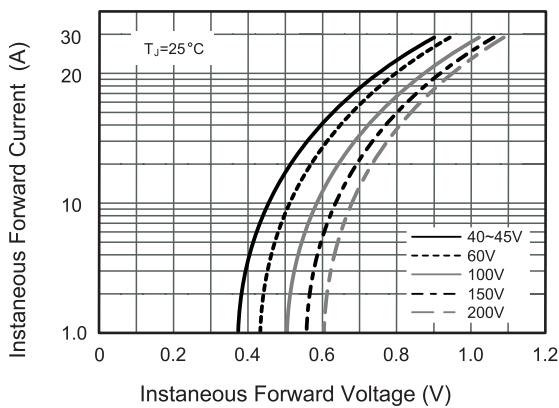


Fig.4 Typical Junction Capacitance

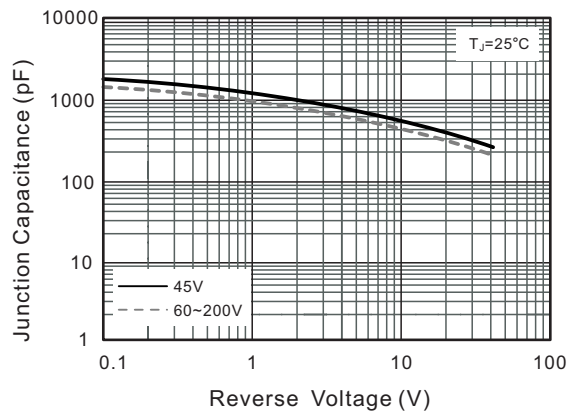


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

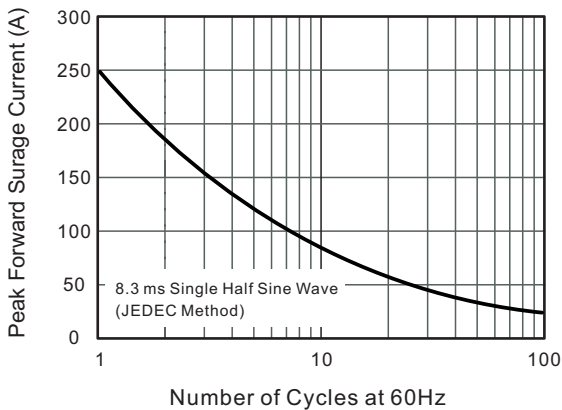
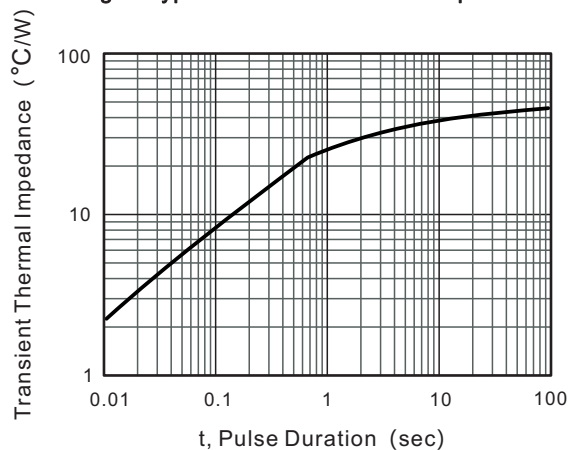


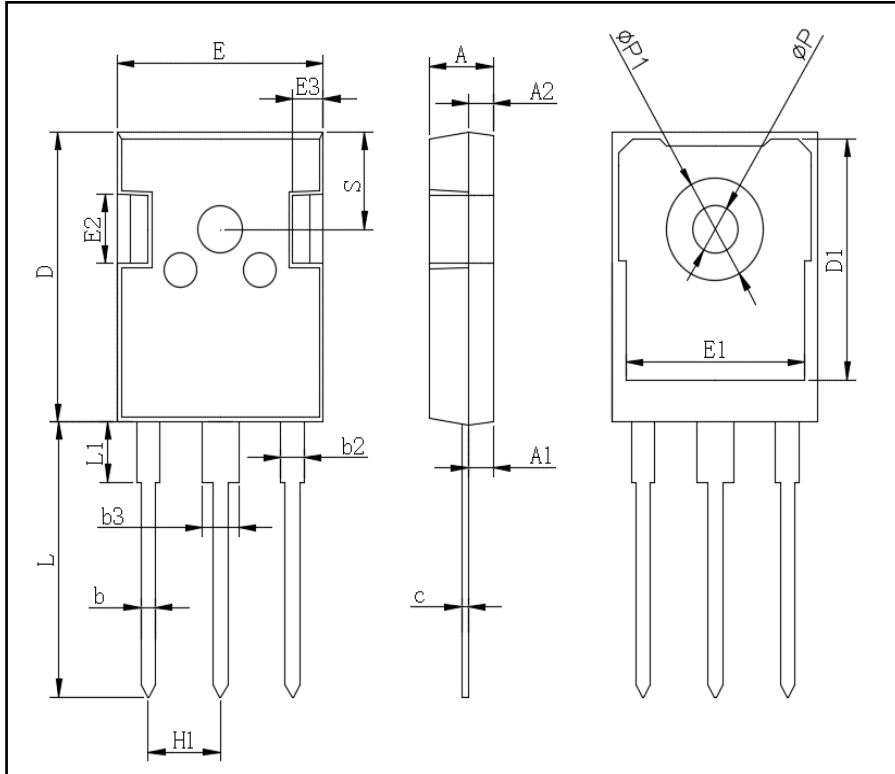
Fig.6- Typical Transient Thermal Impedance



The curve above is for reference only.

Outlitne

TO-247-3L Package Outline Dimensions



TO-247-3L		
Dim	Min	Max
A	4.80	5.20
A1	2.21	2.61
A2	1.85	2.15
b	1.0	1.4
b2	1.91	2.21
C	0.5	0.7
D	20.70	21.30
D1	16.25	16.85
E	15.50	16.10
E1	13.0	13.6
E2	4.80	5.20
E3	2.30	2.70
L	19.62	20.22
L1	-	4.30
ϕP	3.40	3.80
$\phi P1$	-	7.30
S	6.15TYP	
H1	5.44TYP	
b3	2.80	3.20