

Schottky Barrier Rectifier 100V 10A TO-277B AEC-Q101

SS10100T277-A

MERITEK

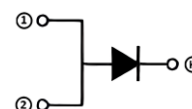
FEATURES

- High Forward Surge Current Capability
- Low Power Losses, High Efficiency Operation
- AEC-Q101 Compliance



MECHANICAL DATA

- Case: Molded Plastic, TO-277B package
- Epoxy : UL 94V-0 Rate Flame Retardant
- Terminals: Solder plated, solderable per MIL-STD-750, method 2026

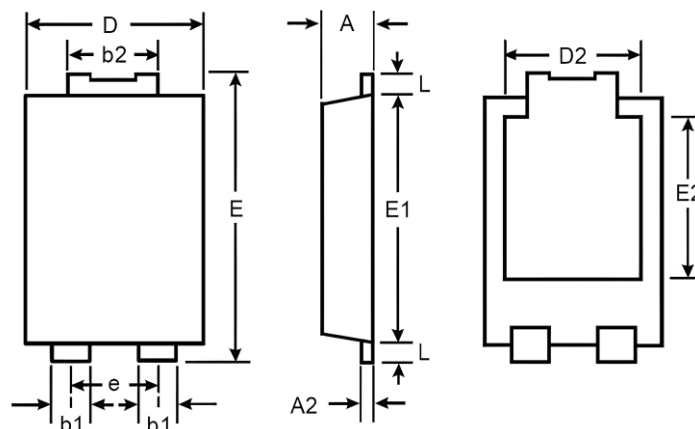


MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Value	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	10	A
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	175	A
Maximum Reverse Current at Rated DC Blocking Voltage	I_R	$T_A=25^{\circ}C$ 0.5	mA
		$T_A=100^{\circ}C$ 50	
Maximum Forward Voltage at $I_F = 10A$	V_F	0.85	V
Typical Thermal Resistance from Junction to ambient	$R_{\theta JC}$	60	$^{\circ}C/W$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150	$^{\circ}C$

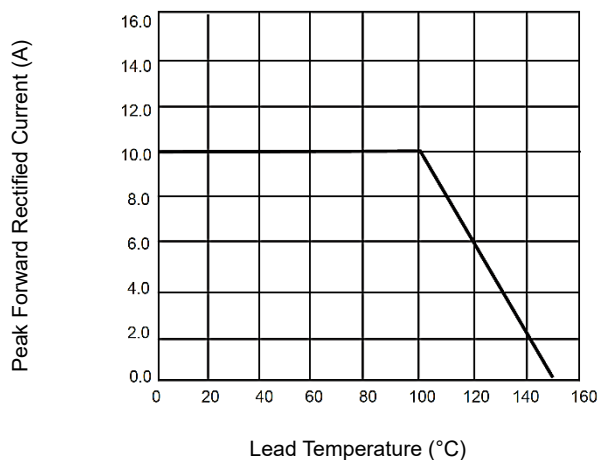
DIMENSIONS

Item	Min. (mm)	Max. (mm)
A	0.95	1.25
A2	0.20	0.45
b1	0.80	1.00
b2	1.70	1.90
D	3.80	4.30
D2	2.85	3.30
E	6.30	6.70
E1	5.28	5.80
E2	3.25	3.85
e	1.65	1.95
L	0.41	0.71

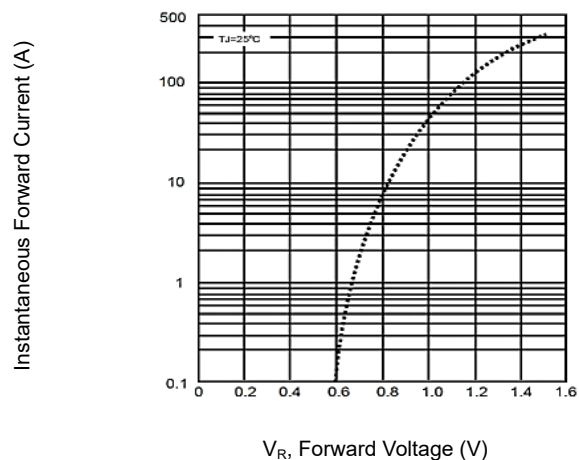


CHARACTERISTIC CURVES

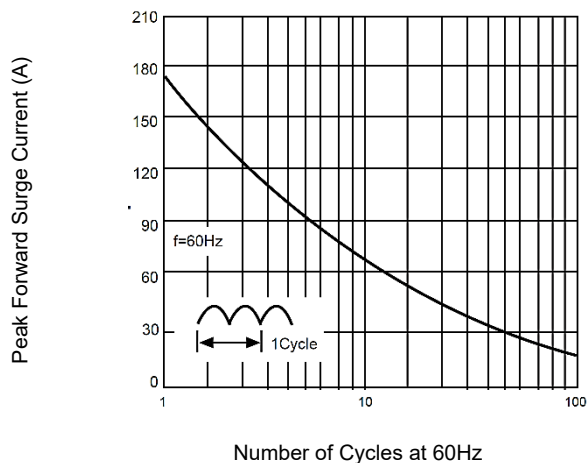
Typical Forward Current Derating Curve



Typical Instantaneous Forward Characteristics



Maximum Non-Repetitive Forward Surge Current



Typical Reverse Characteristics

