



Schottky Diodes

High frequency operation, High peak voltage, High temperature, Mechanical strength, and mounting convenience. Guard ring for enhanced ruggedness and long term reliability. Part number suffix 'Q' means AEC-Q101 qualified.

Typical Applications

Typical applications are in switching power supplies, converters, automotive, freewheeling diodes, and reverse battery protection.

Mechanical Data

Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102

Polarity: As marked

Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	VALUE
Repetitive peak reverse voltage	V_{RRM}	V	60
Average Rectified Output Current (460Hz sine wave)	I_O	A	15
Forward Surge Current (Non-repetitive) @60Hz half-sine wave, 1 cycle, Ta=25	I_{FSM}	A	200
Current Squared Time @1ms to 8.3ms Tj=25	I^2t	A ² s	166
Storage Temperature	T_{stg}		-55 ~ +150
Junction Temperature	T_J		-55 ~ +150

Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Typ	Max
Instantaneous forward voltage	V_F	V	$I_F=15A$, $T_J=25$	0.68	0.8
			$I_F=15A$, $T_J=125$	0.59	0.7
Typical junction capacitance	C_J	pF	$V_R=4V$, $f=1$ MHz	600	-
Instantaneous reverse current	I_R	mA	V_R		



Characteristics (Typical)

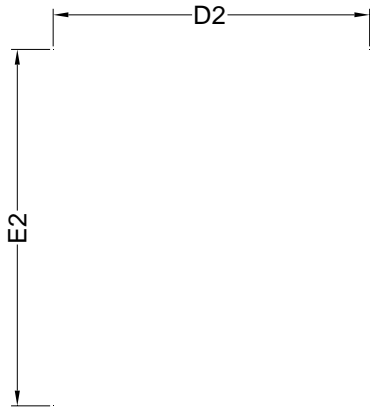






MBR1560P5Q

Outline Dimensions & Suggested Pad Layout



Top View

Bottom View

Side View

SYMBOL	MILLIMETER		
	MIN	NOM	MAX
D	5.15	5.35	5.55
E	5.95	6.15	6.35
A	1.00	1.10	1.20
A1		0.254 BSC	
A2			0.10
D1	3.92	4.12Q	2

Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.10 mm.
3. The pad layout is for reference purposes only.

