



Schottky Diodes



Features

- X High frequency operation
- X High purity, high temperature epoxide enhanced mechanical strength
- X Guard ring for enhanced ruggedness
- X Solder dip 275 °C max. 7 s, per

Typical Applications

Typical applications are in ss, switch, freewheeling diodes, and reverse ba

Mechanical Data

- X P : Tin plated leads, solderable
- J - STD - 002 and JESD22 - B102

Polarity: As marked X

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

PARAMETER	SYMBOL	UNIT	MBRL40100CT
Device marking code			MBRL40100CT
Repetitive Peak Reverse Voltage	V_{RRM}	V	100
Average Rectified Output Current @ 60Hz sine wave, 3% R-load, T _c = 121 °C	I_{b}	A	40
Surge (Non-repetitive) Forward Current @ 60Hz half sine-wave, 1 cycle	I_{FSM}	A	300
Current Squared Time @ 1ms	$t_{Q8.3}$	ms	373
Storage Temperature	T _{stg}	°C	-55 ~ +150
Junction Temperature	T _j	°C	-55 ~ +150

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

	I _{FM}	V	$I_{FM} = 20.0A$ T _j = 25 °C	0.5	0.65	0.71
			$I_{FM} = 20.0A$ T _j = 125 °C	-	0.61	0.65
Maximum DC reverse current at rated DC blocking voltage	I _{RRM2}	V	$V_{RM} = V_{RM}$ T _j = 25 °C	-	-	0.08
			$V_{RM} = V_{RM}$ T _j = 100 °C	-	-	20

Note1: Pulse test: 300μs pulse width, 1% duty cycle

Note2: Pulse test: pulse width 40ms



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