

/ Descriptions

TO-263

Schottky Diode in a TO-263 Plastic Package.

/ Features

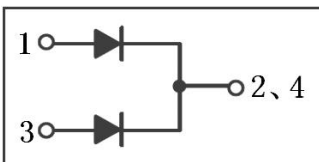
AEC-Q101

Low power loss, high efficiency, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

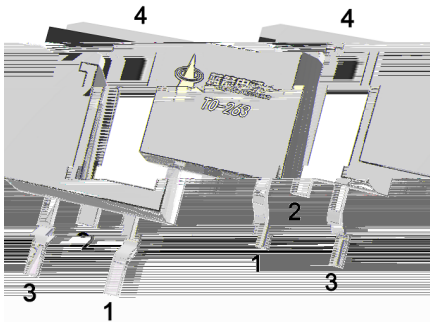
/ Applications

For use in low voltage,high frequency inverters, free wheeling, and polarity protection applications, Meet the stringent requirements of automotive applications.

/ Equivalent Circuit



/ Pinning



PIN1 Anode

PIN 2 4 Cathode

PIN 3 Anode

/ Marking

See Marking Instructions.

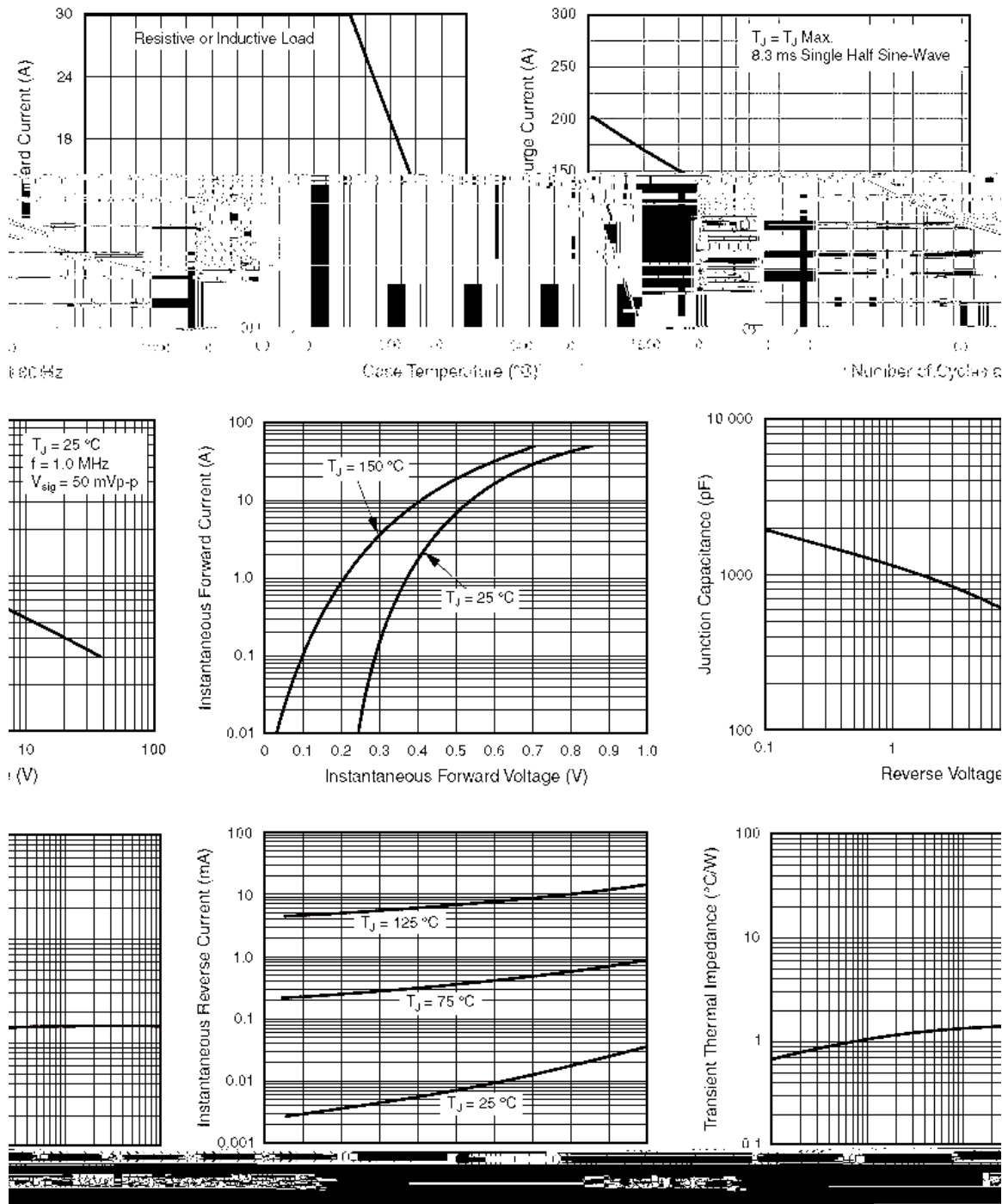
/ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	45	V
Peak Repetitive Forward Current	$I_{F(AV)}$	15	A
	$I_{F(AV)}$ total device	30	A
Non-Repetitive Peak Forward Surge Current	I_{FSM}	200	A
Repetitive Peak Reverse Surge Current	I_{RRM}	2.0	A
Thermal Resistance Junction to Case	$R_{\theta Jc}$	1.5	/W
Junction Temperature Range	T_j	150	
Storage Temperature Range	T_{stg}	-65 150	

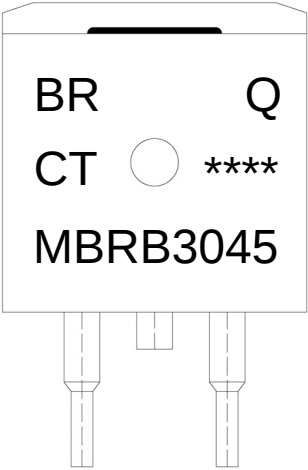
/ Electrical Characteristics($T_a=25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=30\text{A}(T_c=25^\circ\text{C})$			0.76	V
		$I_F=20\text{A}(T_c=125^\circ\text{C})$			0.60	V
		$I_F=30\text{A}(T_c=125^\circ\text{C})$			0.72	V
Instantaneous Reverse Current	I_R	$T_j=25$			1.0	mA
		$T_j=125$			60	mA
Voltage Rate of Change	dv/dt				10000	V/ μs

/ Electrical Characteristic Curve



/ Marking Instructions



BR

Q

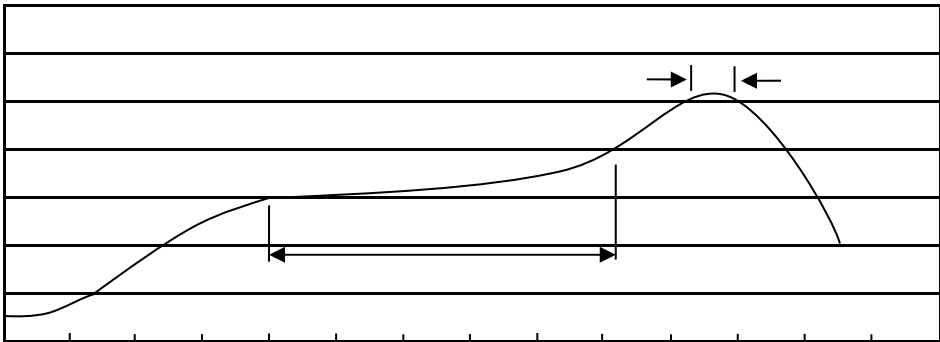
MBRB3045

CT:

Note:

BR:	Company Code
Q:	Automobile halogen-free product Code
MBRB3045	Product Type Code
CT:	Internal Structure
****:	Lot No. Code, code change with Lot No

() / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- 1

150 200

60 120sec;

1.Preheating:150~200 , Time:60~120sec.
- 2

255±5

5±0.5sec;

2.Peak Temp.:255±5 , Duration:5±0.5sec.
- 3

2 10 /sec.

3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

260±5

10±1 sec.

Temp.:260±5

Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
TO-263	800	1	800	6	4,800	13 ×24	360×360×50	380×335×366

/ TUBE

Package Type	Units					Dimension (unit mm ³)		
TO-263	50	20	1,000	5	5,000	532×33×7.0	555×164×50	575×290×180

/ Notices