

/ Revised record

G	2018-10				
H	2020-10-26				
A	2022-4-23	all	BR/Q AEC-Q101 , Q $245\pm 5^{\circ}\text{C}$ $5\pm$ 0.5sec 5°C $255\pm$ $5\pm 0.5\text{sec}$		

/ Descriptions

TO-277

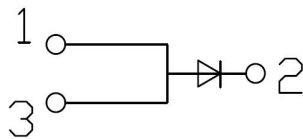
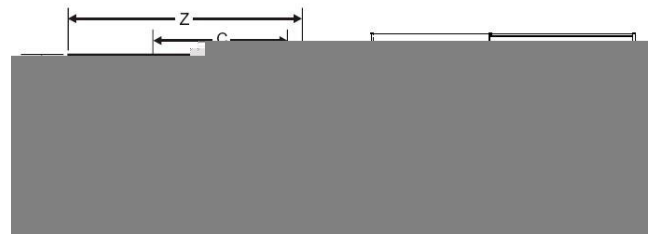
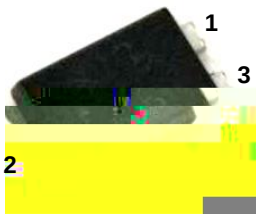
TO-277 Plastic package Schottky diode .

/ Features**AEC-Q101**

High Forward Surge Capability, Ultra Low Forward Voltage Drop,Excellent High Temperature Stability, 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 Cathode PIN 3 Anode

Suggested Pad layout

/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RM} V_{RSM} V_{DC}	100	V
RMS Reverse Voltage	V_{RMS}	70	V
Average forward rectified current	$I_{F(AV)}$	1×10	A
Non Repetitive Peak Surge Current	I_{FSM}	200	A
Thermal Resistance Junction to Case	$R_{\theta Jc}$	1.4	°C/W
Junction and Storage Temperature Range	T_j T_{stg}	-55~+150	°C

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	$V_{(BR)R}$	$I_R=1mA(Ta=25^{\circ}C)$	100			V
Forward Voltage	V_F	$I_F=2A(Ta=25^{\circ}C)$		0.41	0.45	V
		$I_F=10A(Ta=25^{\circ}C)$		0.58	0.65	V
		$I_F=2A(Ta=125^{\circ}C)$		0.31	0.40	V
		$I_F=10A(Ta=125^{\circ}C)$		0.55	0.65	V
Instantaneous Reverse Current	I_R (Note 1)	$V_R=100V(Ta=25^{\circ}C)$			150	μA
		$V_R=100V(Ta=125^{\circ}C)$			25	mA

注/Notes :

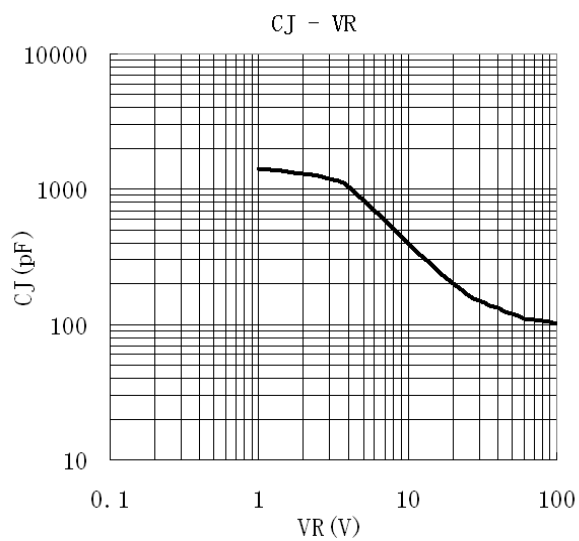
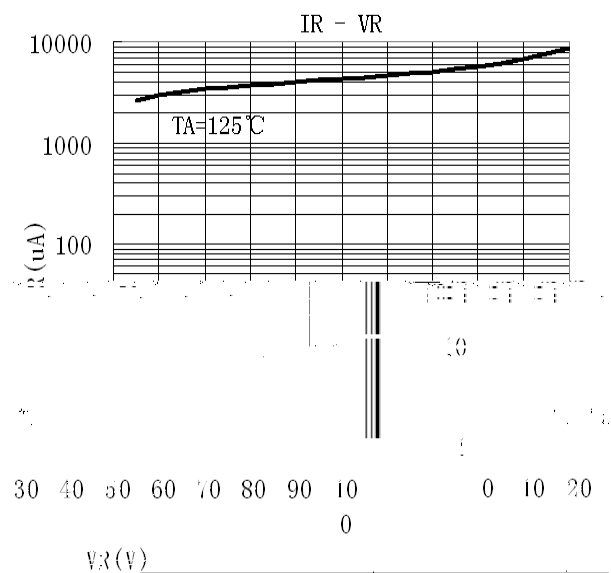
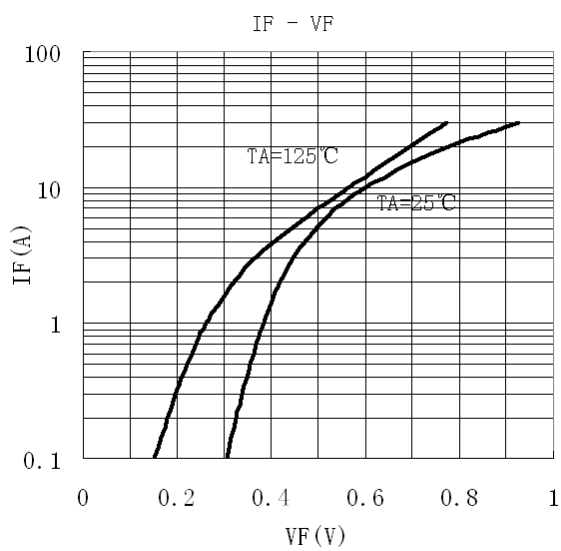
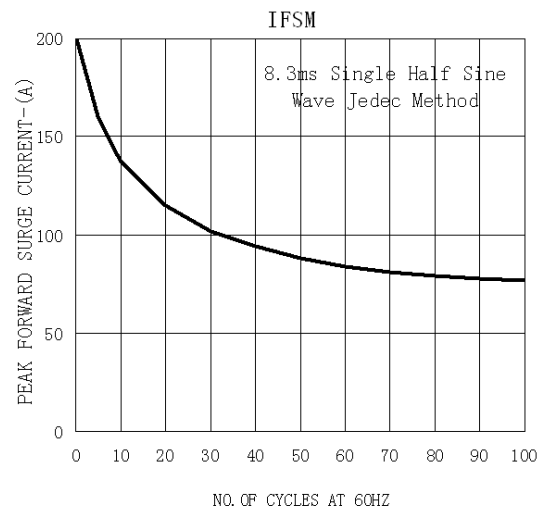
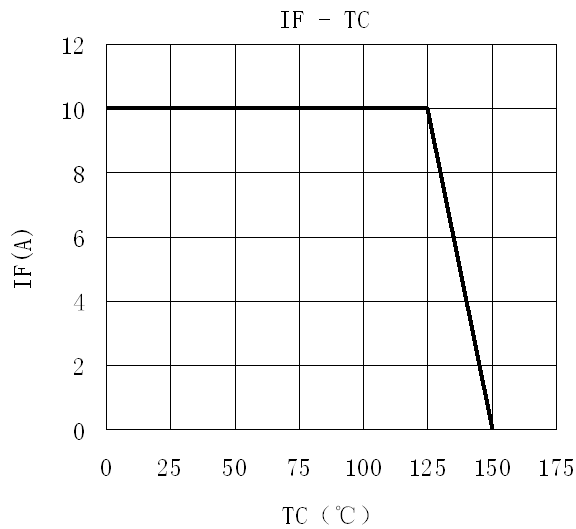
1.

Short duration pulse test used to minimize self-heating effect.

2.

Unless otherwise noted, values for the parameters of a single chip

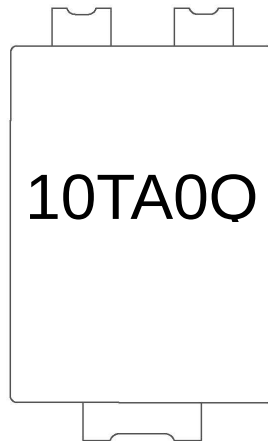
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



说明：

10TA0：为型号代码

Q：为汽车无卤产品标识

****：为生产批号代码，随生产批号变化

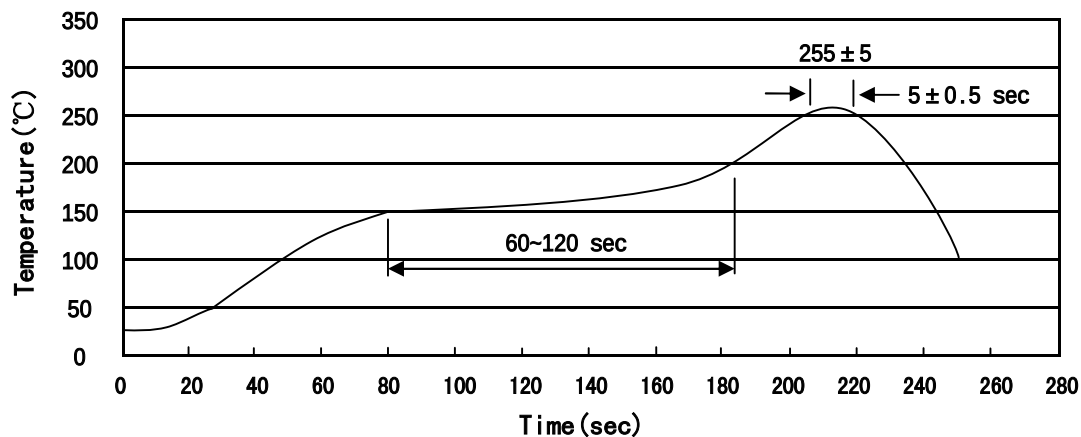
Note:

10TA0：Product Type

Q: Automobile halogen-free product Code

****: 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°C, Time:60~120sec. |
| 2 | 255±5 | | 5±0.5sec; | | 2.Peak Temp.:255±5°C, Duration:5±0.5sec. |
| 3 | | 2 | 10°C/sec. | | 3. Cooling Speed: 2~10°C/sec. |

/ Resistance to Soldering Heat Test Conditions

260±5°C

10±1 sec.

Temp.:260±5°C

Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	只 卷盘	卷盘 盒	只 盒	盒 箱	只 箱			
						"		

/ Notices