

R-6

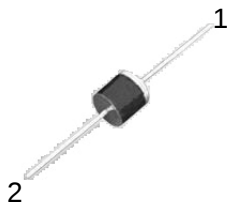
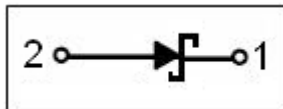
Schottky Barrier Diode in a R-6 Plastic Package.

Low forward voltage drop, low power losses, High efficiency operation.

OR-ing

DC-DC

For use in solar cell junction box as a bypass diode for protection, high frequency inverters, switching power supplies, freewheeling diodes, OR-ing diode, dc-to-dc converters and reverse battery protection.



PIN1 Cathode

PIN 2 Anode

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	45	V
Maximum RMS Voltage	V_{RMS}	31.5	V
Maximum Average forward current	$I_{F(AV)}$	30	A
Non Repetitive Peak Surge Current	I_{FSM}	300	A
Thermal Resistance Junction to Case ⁽¹⁾	$R_{\theta Jc}$	3.5	°C/W
Operating junction and storage temperature range (AC mode)	T_j T_{stg}	-65~+150	°C
Junction temperature in DC forward current without reverse bias, $t \leq 1$ h	T_j max. ⁽²⁾	≤ 150	°C

Notes

- 1 Measured at 1.0 MHz and applied reverse voltage of 4.0VDC.
- 2 2 bypass diode thermal test DC forward current without reverse bias

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Breakdown voltage	V_{BR}	$I_R=1mA$ ($T_A=25^\circ C$)	45			V
Forward Voltage	V_F (Note 1)	$I_F=15A$ ($T_A=25^\circ C$)		0.46		V
		$I_F=30A$ ($T_A=25^\circ C$)		0.52	0.60	V
		$I_F=15A$ ($T_A=125^\circ C$)		0.40		V
		$I_F=30A$ ($T_A=125^\circ C$)		0.53		V
Instantaneous Reverse Current	I_R (Note 2)	$V_R=45V$ ($T_A=25^\circ C$)		17	80	μA
		$V_R=45V$ ($T_A=125^\circ C$)			80	mA

Notes

- (1) Pulse test: 300 μs pulse width, 1 % duty cycle
- (2) Pulse test: Pulse width ≤ 40 ms
- (3) Unless otherwise noted, values for the parameters of a single chip

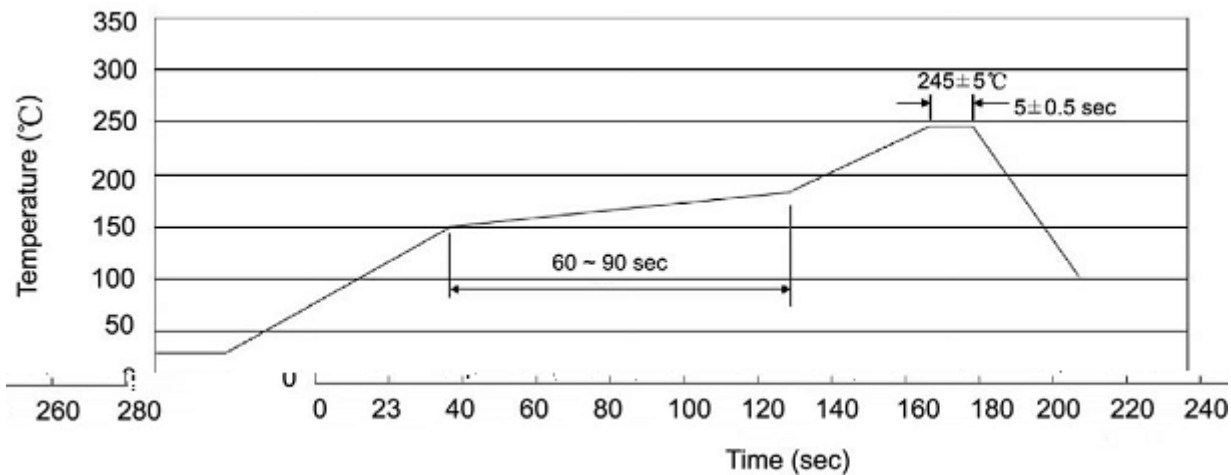


30T45

Note:

30T45 Product Type Code.

Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-------|-----|-----------|--------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 245±5 | | 5±0.5sec; | | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

260±5 10±1 sec. Temp.:260±5°C Time:10±1 sec

/ BULK

Package Type 封装形式	Units 包装数量			Dimension 包装尺寸 (unit: mm ³)	
	Units/Bag 只/袋	Units/Outer Box 只/箱	Gross Weight/Kg 总重/千克	Inner Box 盒	Outer Box 箱
R-6	250	6,000	14	293×73×40	330×330×270

/ AMMO

Package Type 封装形式	Units 包装数量			Dimension 包装尺寸 (unit: mm ³)			
	Units/Tape 只/纸带	Units/Outer Box 只/箱	Gross Weight/Kg 总重/千克	Component Space 带宽	Tape Space 编带长	Inner Box 盒	Outer Box 箱
R-6	500	5,000	12	9.5	52	360×360×50	385×257×392