

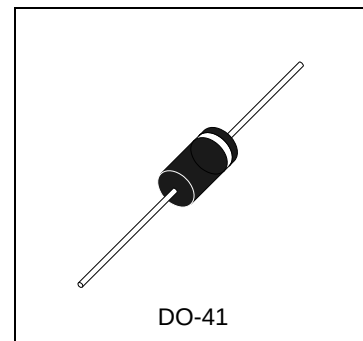


HSR220 thru HSR2100

Schottky Barrier Rectifiers
(Reverse Voltage 20 to 100V, Forward Current 2A)

Features

- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability



Mechanical Data

- Cases: DO-41 molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- High temperature soldering guaranteed: 250°C/10seconds/.375"(9.5mm) lead lengths at 5lbs.,(2.3kg) tension
- Weight: 0.35gram

Maximum Ratings & Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

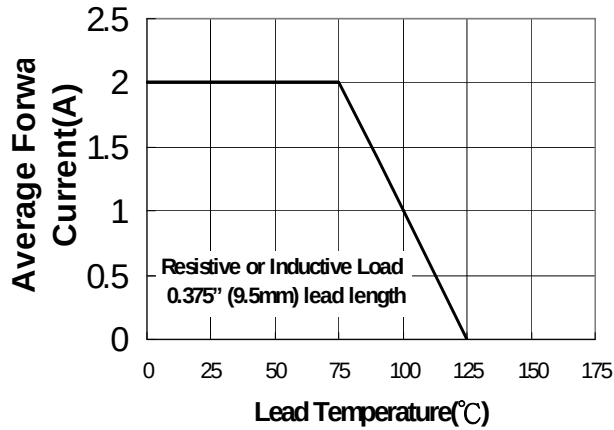
Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load. Derate current by 20%.

Ratings	Symbol	HSR 220	HSR 230	HSR 240	HSR 250	HSR 260	HSR 280	HSR 2100	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	V
Surge Peak Reverse Voltage	V _{RSM}	14	21	28	35	42	57	71	V
DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	V
Average Forward Rectified Current (T _A =75°C)	I _{FAV}	2							A
Peak Forward Surge Current, 50Hz Half Sine-wave (T _A =25°C)	I _{FSM}	50							A
Repetitive Peak Forward C (f>15Hz)	I _{FRM}	12							A
Instantaneous Forward Voltage	V _F	0.48	0.52		0.65		0.8		V
Leakage Current (T _J =25°C, V _R =V _{RRM})	I _R	0.1							mA
Leakage Current (T _J =100°C, V _R =V _{RRM})		10							mA
Typical Junction Capacitance	C _J	170							pF
Rating for Fusing, t<10ms (T _A =25°C)	i ² t	12.5							A ² s
Thermal Resistance Junction to Ambient Air	R _{θJA}	30							°C/W
Thermal Resistance Junction to Lead	R _{θJL}	15							°C/W
Operating Junction Temperature Range	T _J	-65 to +125							°C
Storage Temperature Range	T _{STG}	-65 to +150							°C
ESD Protection Voltage	V _{ESD}	12							KV

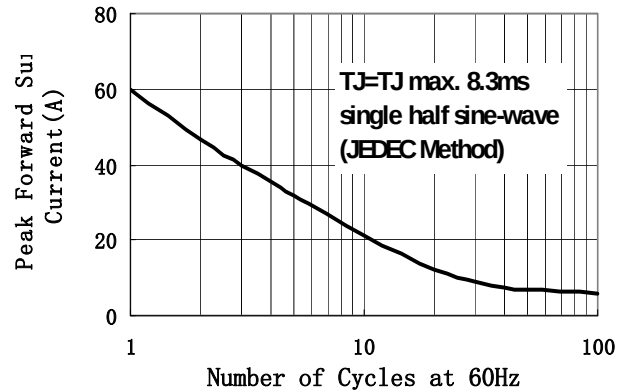


Characteristics Curve

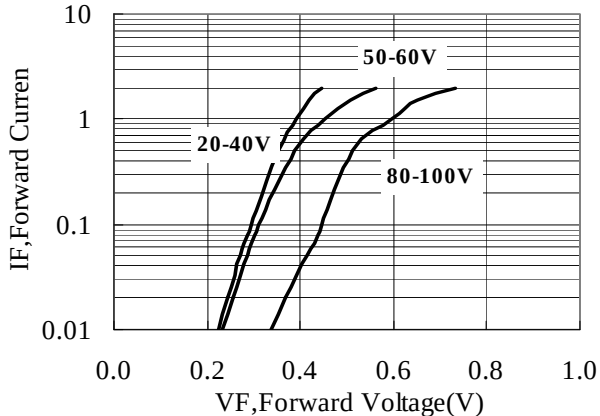
Forward Current Derating Curve



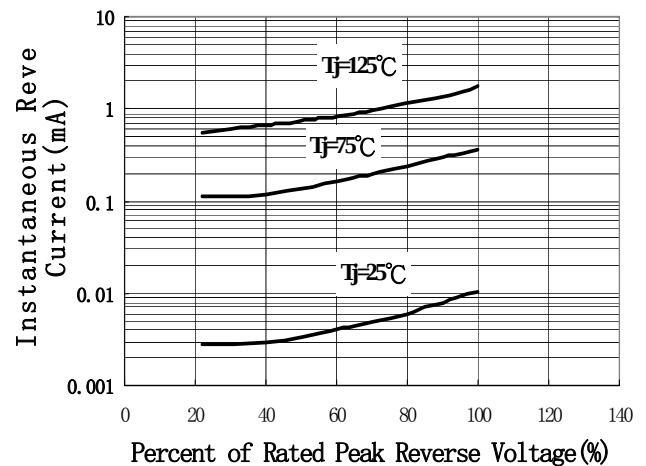
Maximum Non-repetitive Peak Forward Surge Current



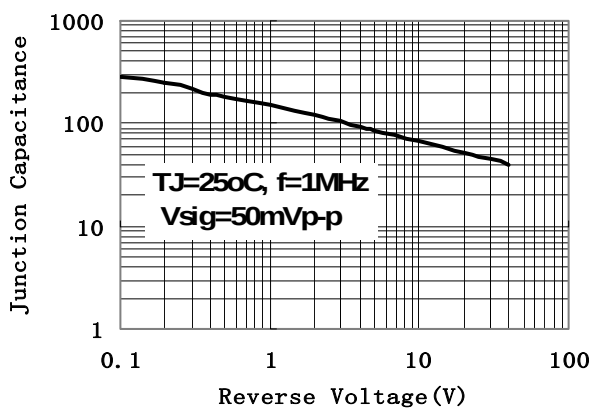
Typical Instantaneous Forward Characteristics Per Leg



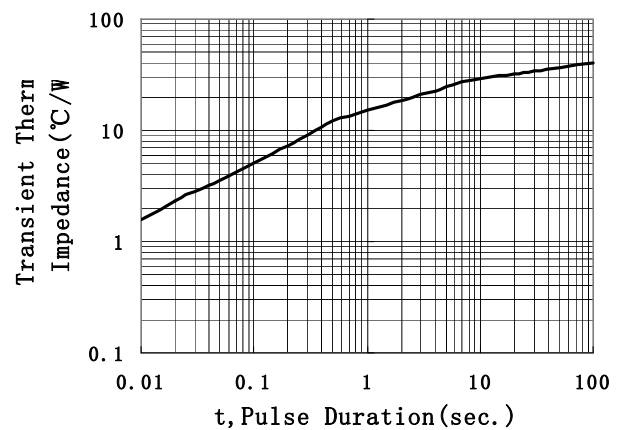
Typical Reverse Characteristics



Typical Junction Capacitance

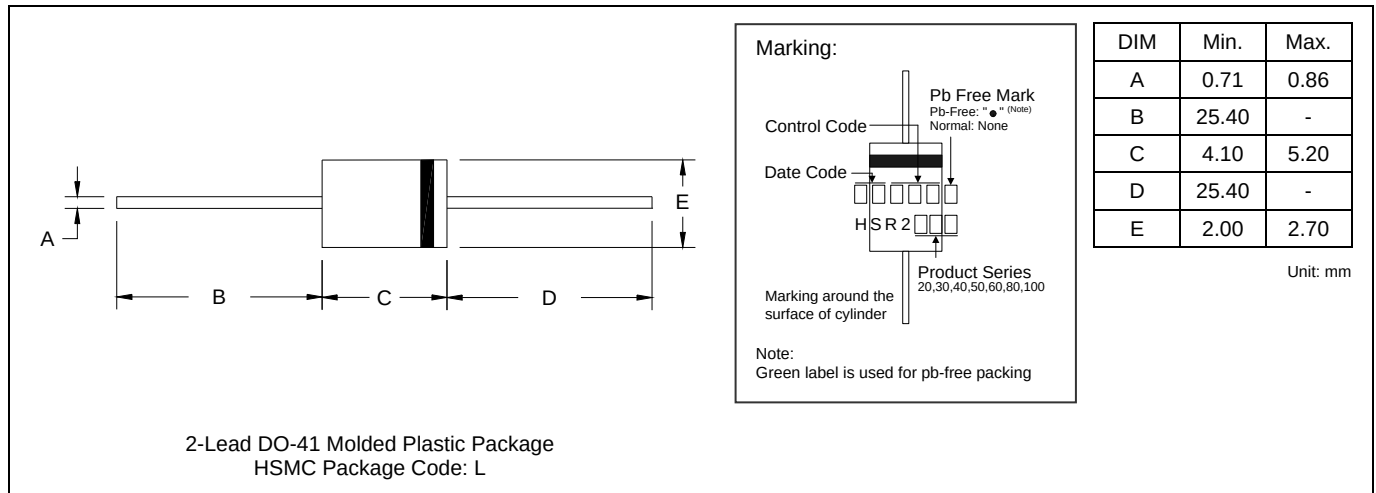


Typical Transient Thermal Impedance





DO-41 Dimension



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Head Office And Factory:

- **Head Office** (Hi-Sincerity Microelectronics Corp.): 10F.,No. 61, Sec. 2, Chung-Shan N. Rd. Taipei Taiwan R.O.C.
Tel: 886-2-25212056 Fax: 886-2-25632712
- **Factory 1:** No. 38, Kuang Fu S. Rd., Fu-Kou Hsin-Chu Industrial Park Hsin-Chu Taiwan. R.O.C
Tel: 886-3-5983621~5 Fax: 886-3-5982931