Elektronische Bauelemente

SM20200D

Voltage 200V

20.0 Amp Schottky Barrier Rectifiers

RoHS Compliant Product
A suffix of “-C” specifies halogen & lead-free

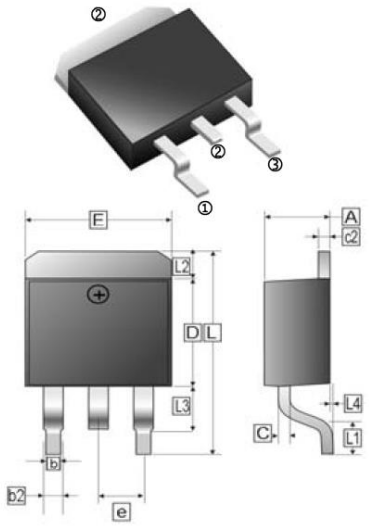
FEATURES

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

MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Lead: Lead Solderable per MIL-STD-202 Method 208 Guaranteed
- Polarity: As Marked
- Mounting Position: Any

TO-263(D²-PACK)



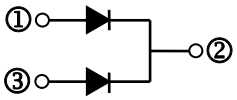
REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.00	4.87	c2	1.07	1.65
b	0.51	1.01	b2	1.34 REF	
L4	0.00	0.30	D	8.0	9.65
C	0.30	0.74	e	2.54 REF	
L3	1.50 REF		L	14.6	16.1
L1	2.5 REF		L2	1.27 REF	
E	9.60	10.67			

PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-263	0.8K	13 inch

ORDER INFORMATION

Part Number	Type
SM20200D	Lead (Pb)-free
SM20200D-C	Lead (Pb)-free and Halogen-free



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

Parameter		Symbol	Rating	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	200	V
Maximum RMS Voltage		V_{RMS}	140	V
Maximum DC Blocking Voltage		V_{DC}	200	V
Maximum Average Forward Rectified Current	Per Leg	I_F	10	A
	Per Device		20	
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load		I_{FSM}	180	A
Maximum Instantaneous Forward Voltage @10A Per Leg	T_A=25°C	V_F	0.92	V
	T_A=125°C		0.80	
Maximum Reverse Current at Rated VR Per Diode [3]	T_A=25°C	I_R	0.01	mA
	T_A=125°C		5	
Voltage Rate of Change		dv/dt	10000	V/us
Typical Junction Capacitance [1]		C_J	2400	pF
Typical Thermal Resistance from Junction-Case [2]		$R_{\theta JC}$	6	°C/W
Operating & Storage Temperature Range		T_J, T_{STG}	-55~150	°C

Notes:

1. Measured at 1MHz and applied reverse voltage of 4V D.C.
2. FR-4 Board Heat sink size: 10*10*0.2mm.
3. Plus test: 300μs Pulse width, 1% duty cycle.

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CHARACTERISTIC CURVES