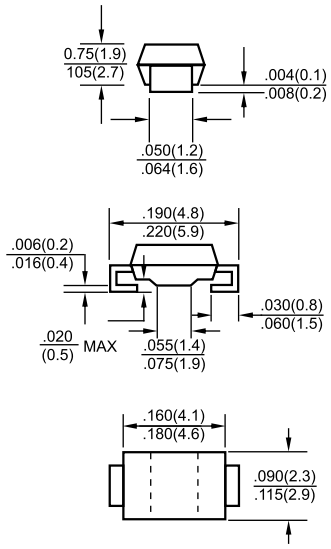
M20

1.0AMP.Surface Mount Rectifiers

RoHS COMPLIANT

CURRENT:1.0A

SMA/DO-214AC



Dimensions in inches and (millimeters)

Fetures

- ◇ For surface mounted application
- ◇ Glass passivated junction chip
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easy pick and place
- ◇ High surge current capability
- ◇ Plastic material used carries Underwriters
- ◇ Laboratory Classification 94V-0
- ◇ High temperature soldering
- ◇ 260 oC / 10 seconds at terminal

Mechanicla Data

- ◇ **Case: Molded plastic SMA/DO-214AC**
- ◇ **Polarity: Indicated by cathode band**
- ◇ **Mounting Position: Any**
- ◇ **Packaging: 12mm tape**
- ◇ **Weight: 0.07 gram**

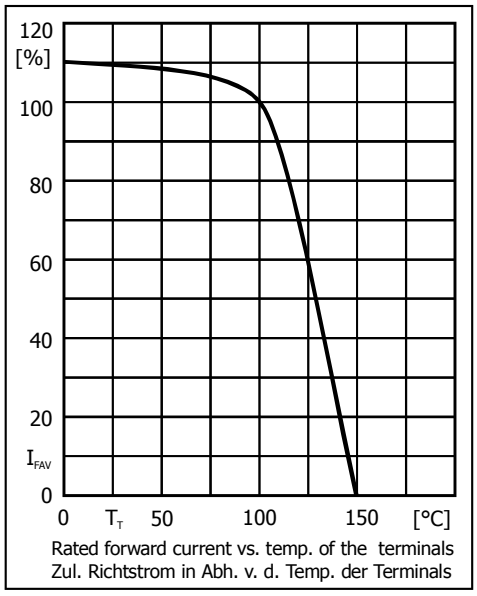
MAXIMUM RATINGS AND ELECTRICAL CHARACTERS

Ratings at 25℃ ambient temperature unless otherwise specified.

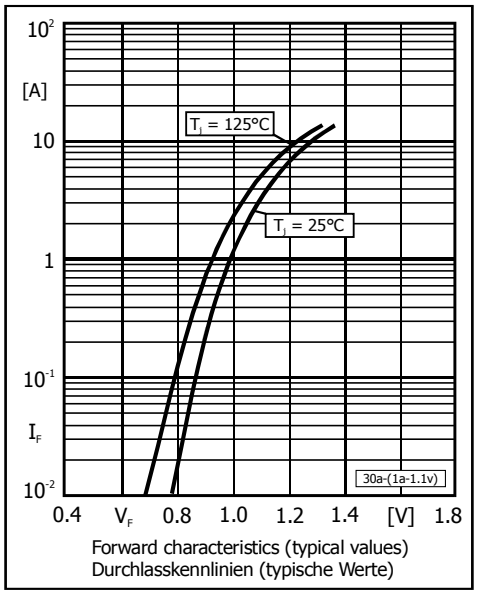
Single phase,half wave,60HZ,resistive or inductive load.For capacitive load,derate by 20%.

Type Numger	Symbol	M20	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	2000	V
Maxium RMS Voltage	V_{RMS}	1400	V
Maxium DC Blocking Voltage	V_{DC}	2000	V
Maximum Average Forward Rectified Current (Note 1) @T_L=110℃	$IF_{(AV)}$	1.0	A
Peak forward surge current:8.3ms single half-sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30	A
I2t Rating for Fusing (t < 8.3ms)	I2t	4.5	A2S
Forward Voltage @IF=1.0A	V_{FM}	1.1	V
Maximum DC Reverse Current @TA=25℃	I_R	5	Ua
at Rated DC Blocking Voltage @TA=100℃	I_R	50	Ua
Typical Junction Capacitance (Note 1)	C_J	12	pF
Operating Temperature Range	T_J	-55 to +150	℃
Storage Temperature Range	T_{STG}	-55 to +150	℃

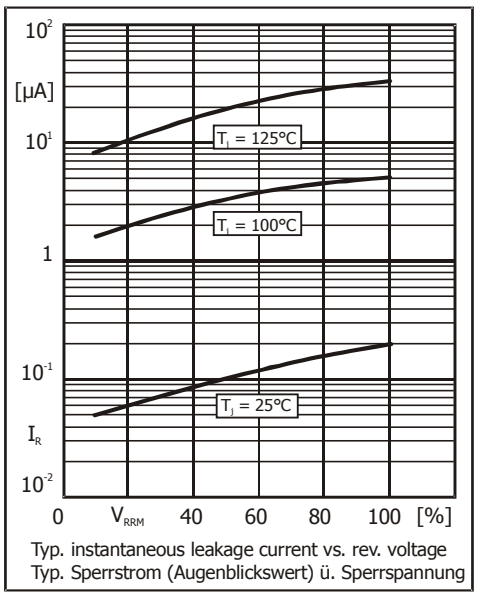
Note: 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.



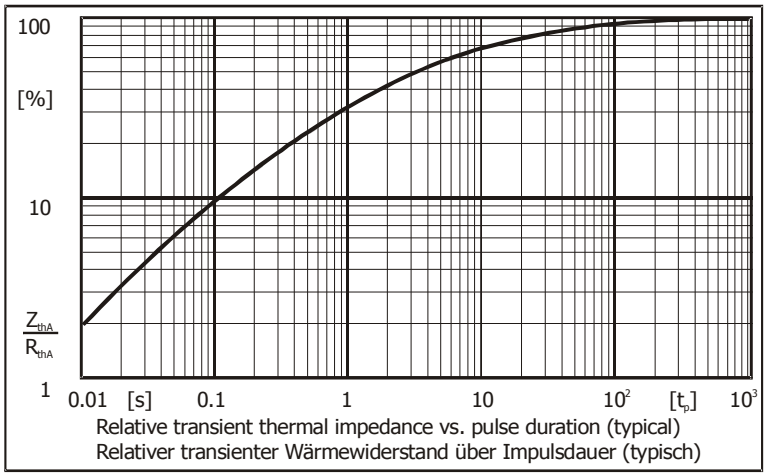
Rated forward current vs. temp. of the terminals
Zul. Richtstrom in Abh. v. d. Temp. der Terminals



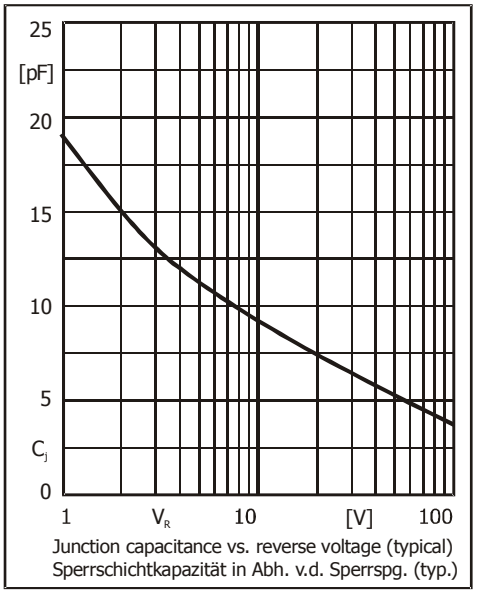
Forward characteristics (typical values)
Durchlasskennlinien (typische Werte)



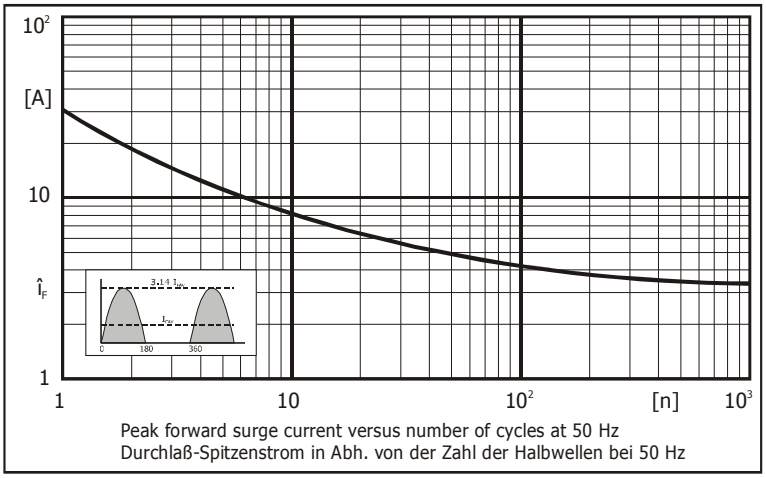
Typ. instantaneous leakage current vs. rev. voltage
Typ. Sperrstrom (Augenblickswert) ü. Sperrspannung



Relative transient thermal impedance vs. pulse duration (typical)
Relativer transienter Wärmewiderstand über Impulsdauer (typisch)



Junction capacitance vs. reverse voltage (typical)
Sperrschichtkapazität in Abh. v.d. Sperrspg. (typ.)



Peak forward surge current versus number of cycles at 50 Hz
Durchlaß-Spitzenstrom in Abh. von der Zahl der Halbwellen bei 50 Hz